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Characteristics of Recent Science and Engineering Graduates: 1993

Detailed Statistical Tables

Division of Science Resources Studies
Directorate for Social, Behaviorial and Economic Sciences

National Science Foundation

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Detailed Statistical Tables

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Division of Science Resources Studies
Directorate for Social, Behaviorial and Economic Sciences

National Science Foundation NSF 96-309

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GENERAL NOTES

These tables present data on the characteristics of men and women who received a bachelor's or master's degree in a science or engineering field from U.S. academic institutions during the 1990/91 (1991) and 1991/92 (1992) academic years. The data were collected in 1993 and reflect the status of individuals as of April of that year. In addition to the demographic characteristics of recent college graduates with science and engineering degrees, the data may be used to understand the employment experiences of recent graduates such as the extent to which recent graduates entered the labor force, whether they were able to find employment, and the attributes of that employment. Results of this survey are presented separately for bachelor's and master's degree recipients, and also separately for graduates of the two graduating class years.

This report contains three sections. The technical notes in section A contain information on survey methodology, coverage, concepts, definitions, and sampling errors. Detailed tabulations from the survey are presented in section B. Although data were collected using both Computer-Assisted Telephone Interviews (CATI) and mail questionnaires, we have only included a copy of the written questionnaire in section C.

SECTION A. TECHNICAL NOTES

OVERVIEW

The 1993 National Survey of Recent College Graduates (NSRCG:93) is sponsored by the National Science Foundation (NSF), Division of Science Resources Studies (SRS). The NSRCG is one of three data collections covering personnel and graduates in science and engineering. The other two surveys are the National Survey of College Graduates (NSCG) and the Survey of Doctoral Recipients (SDR). Together, they constitute the NSF's Scientists and Engineers Statistical Data System (SESTAT). These surveys serve as the basis for developing estimates and characteristics of the total population of scientists and engineers in the United States.

The first NSF-sponsored NSRCG (then known as New Entrants) was conducted in 1974. Subsequent surveys were conducted in 1976, 1978, 1979, 1980, 1982, 1984, 1986, 1988, 1990, and 1993. In the initial survey, data were collected only on bachelor's degree recipients, but all ensuing surveys included both bachelor's and master's degree recipients.

For the NSRCG:93, the school and graduate sampling was done by the Institute for Survey Research (ISR) at Temple University, and the survey collection, processing, weighting, and table production were conducted by Westat, Inc. A sample of 275 colleges and universities was asked to provide lists of eligible bachelor's and master's degree recipients. From these lists, a sample of 25,785 graduates (16,585 bachelor's and 9,200 master's) was selected. These graduates were interviewed between May and November of 1993. Computer-assisted telephone interviewing (CATI) served as the primary means of data collection. Mail data collection was used only for those who could not be reached by telephone. The unweighted response rate for institutions was 99 percent, and the unweighted response rate for graduates was 86 percent. The weighted response rates were 99 and 84 percent, respectively.

The NSRCG questionnaire was expanded and revised substantially by NSF for the 1993 survey. This revision was done in coordination with similar revisions to the other SESTAT surveys. Topics covered in the survey include:

- Educational experience before and after obtaining degree;
- Graduate employment characteristics including occupation, salary, unemployment, underemployment, and post-degree work-related training;
- Relationship between education and employment; and
- Graduate background and demographic characteristics.

SAMPLE DESIGN

The NSRCG used a two-stage sample design. In the first stage, a stratified nationally representative sample of 275 institutions was selected with probability proportional to size. There were 196 self- representing institutions, also known as certainty units. Measures of size were devised to account for the relative rareness of certain specialty and nonspecialty major fields of study. Universities with a high proportion of Hispanic, black, and foreign students were oversampled by doubling their measure of size. The 79 noncertainty institutions were implicitly stratified by sorting the list by ethnic status, region, public/private status, and presence of agriculture as a field of study. Institutions were then selected by systematic sampling from the ordered list.

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GRADUATE SAMPLE

The second stage of the sampling process involved selecting graduates within the sampled institutions by cohort. As a first step, each participating institution was asked to send lists of graduates to ISR. Within graduation year (cohort), each eligible graduate was then classified into one of 42 strata based on the graduate's major field of study and degree status.

Table A-1 is a list of the major fields and the corresponding sampling rates by cohort and degree. These rates are overall sampling rates for the major field, so they include the institution's probability of selection and the within-institution sampling rates. To achieve the within-institution sampling rate, the overall rate was divided by the institution's probability of selection.

Table A-1. Major fields and corresponding sampling rates, by cohort and degree: 1993

Major field	1990 bachelor's rate	1990 master's rate	1991 bachelor's rate[1]	1991 master's rate[1]	1992 bachelor's rate	1992 master's rate
Chemistry	1/48	1/12	1/48 (1/24)	1/6	1/24	1/6
Physics/astronomy	1/12	1/12	1/12 (1/6)	1/6	1/6	1/6
Other physical sciences	1/24	1/12	1/6	1/6	1/6	1/4
Mathematics/statistics	1/48	1/24	1/48	1/24	1/48	1/24
Computer sciences	1/72	1/48	1/72	1/24 (1/48)	1/72	1/48
Environmental sciences	1/3	1/3	1/24	1/6 (1/12)	1/24	1/12
Aero/astronautical engineering	1/12	1/3	1/12	1/6	1/12	1/6
Chemical engineering	1/12	1/6	1/12	1/3	1/12	1/3
Civil engineering	1/24	1/12	1/24	1/12 (1/24)	1/24	1/24
Electrical engineering	1/72	1/48	1/72	1/24	1/72	1/24
Industrial engineering	1/12	1/6	1/12 (1/6)	1/3	1/12	1/4
Materials engineering	1/2	1/2	1/3 (1/2)	1/2 (1/4)	1/2	1/4
Mechanical engineering	1/48	1/12	1/48	1/12 (1/24)	1/48	1/24
Other engineering	1/72	1/24	1/72	1/12 (1/24)	1/72	1/24
Biological sciences	1/72	1/24	1/44	1/12 (1/24)	1/144	1/24
Agricultural sciences	1/24	1/12	1/24 (1/12)	1/6 (1/12)	1/12	1/12
Psychology	1/144	1/24	1/144	1/12 (1/24)	1/144	1/24
Economics	1/72	1/12	1/72	1/12 (1/24)	1/72	1/24
Sociology/anthropology	1/48	1/12	1/72	1/6 (1/12)	1/72	1/12
Other social sciences	1/144	1/24	1/144	1/12 (1/24)	1/144	1/24
No field	1/48	1/144	1/24 (1/12)	1/24	1/24	1/24

[1] Sampling rates in some categories were changed during sampling. For these categories, the second set of rates is shown in parentheses.

SOURCE: National Science Foundation, 1993 National Survey of Recent College Graduates

GRADUATE ELIGIBILITY

To be included in the sample, the graduates had to meet all of the following criteria:

- They received a bachelor's or master's degree in an eligible major from the college or university from which they were sampled.
- They received their degree within the time period for which they were sampled. For the 1993 study, there were three time frames (April 1990 through June 1990, July 1990 through June 1991, and July 1991 through June 1992).
- They were under the age of 76 and alive during the week of April 15, 1993 (the reference week).
- They lived in the United States during the reference week.

DATA COLLECTION AND RESPONSE

Prior to graduate data collection, it was first necessary to obtain the cooperation of the sampled institutions that provided lists of graduates. Since the sample included graduates from three time frames between 1990 and 1992, lists were collected from the institutions in three waves. The response rate for the institution collection was 99.4 percent.

Graduate data collection took place between May and November of 1993, with computer-assisted telephone interviewing as the primary means of data collection. Flyers were sent to all graduates announcing the study and asking for phone numbers at which they could be reached during the survey period. Extensive tracing of graduates was required to obtain the desired response rate. Tracing activities included computerized telephone number searches, national change of address searches (NCOA), school alumni office contacts, school major field department contacts, directory assistance, military locators, post office records, personal referrals from parents or others who know the graduate, and the use of professional tracing organizations.

Table A-2 gives the response rates by cohort, degree, major, sex, and type of address. The overall unweighted graduate response rate is 86 percent. The weighted response rate is 84 percent. The weighted overall or second-stage response rate is calculated as the school response rate times the graduate response rate (.994 x .841 = .836). As can be seen from table A-2, response rates varied somewhat by major field of study and by sex. Rates were lowest for those with foreign addresses.

WEIGHT CALCULATIONS

To produce national estimates, the data were weighted. Weighting the data adjusted for unequal selection probabilities and for nonresponse at the institution and graduate level. In addition, a ratio adjustment was made at the institution level using the number of graduates reported in specified IPEDS categories of major and degree. The final adjustment to the graduate weights adjusted for those responding graduates who could have been sampled twice. For example, a person who obtained an eligible bachelor's degree in 1990 could have obtained an eligible master's degree in 1992 and could have been sampled for either degree. To make the estimates from the survey essentially unbiased, we modified the weights of all responding graduates who could have been sampled twice. The weights of these graduates were divided by 2.

Table A-2. Number of sampled graduates, unweighted graduate response rates, weighted graduate response rates, weighted list collection response rates, and overall response rates, by graduate characteristics: 1993

Graduate characteristic	Number of sampled graduates by status				Unweighted graduate response rate[2]	Weighted response rates		
	Total	Response		Non-response		Graduate response rate	List collection response rate[3]	Overall response rate[4]
		Complete	Ineligible[1]					
Total	25,785	19,426	2,670	3,689	85.7%	84.1%	99.4%	83.6%
Graduation cohort								
Spring 1990	7,324	5,513	730	1,081	85.2%	83.6%	98.5%	82.3%
1990-91	9,648	7,127	1,114	1,407	85.4%	84.0%	99.9%	83.9%
1991-92	8,813	6,786	826	1,201	86.4%	84.5%	99.8%	84.4%
Sampled degree[5]								
Bachelor's	16,585	12,812	1,455	2,318	86.0%	84.1%	99.4%	83.6%
Master's	9,200	6,614	1,215	1,371	85.1%	84.0%	99.4%	83.5%
Sampled degree major[5]								
Physical and environ mental sciences	4,766	3,760	484	522	89.0%	89.0%	99.4%	88.5%
Mathematics/statistics	1,301	987	144	170	86.9%	87.3%	99.4%	86.8%
Computer sciences	1,298	915	121	262	79.8%	79.5%	99.4%	79.1%
Engineering	9,591	7,579	728	1,284	86.6%	85.2%	99.4%	84.7%
Biological sciences	1,407	1,138	86	183	87.0%	87.6%	99.4%	87.1%
Agricultural sciences	952	705	137	110	88.4%	89.7%	99.4%	89.2%
Psychology	1,695	1,299	95	301	82.2%	82.3%	99.4%	81.8%
Economics	1,313	867	173	273	79.2%	79.6%	99.4%	79.1%
Other social sciences	2,730	1,964	313	453	83.4%	83.1%	99.4%	82.6%
Unknown major	732	212	389	131	82.1%	82.1%	99.4%	81.6%
Type of address provided by school at the time of sampling[6]								
U.S. address only	23,711	18,431	2,181	3,099	86.9%	85.2%	99.4%	84.7%
Foreign address	937	294	372	271	71.1%	65.8%	99.4%	65.4%
No address	1,137	701	117	319	71.9%	63.9%	99.4%	63.5%
Sex of graduate[7]								
Male	17,043	12,870	1,675	2,498	85.3%	83.3%	99.4%	82.8%
Female	8,742	6,556	995	1,191	86.4%	85.2%	99.4%	84.7%

[1] The 2,670 ineligibles include the following: graduates living out of the U.S. during the week of April 15, 1993 (1,135), graduates who reported an ineligible major field for their sampled degrees (841), those who did not receive a bachelor's or master's degree from the sampled school within the correct time frame (617), duplicates (50), deceased (26), and over the age of 75 in April 1993 (1).

[2] The graduate response rate is calculated as (R - I) / [(R - I) + (N * p)] where R = Responses (completed plus ineligible), I = Ineligible, N = Nonresponse, and p = Proportion of response found in scope calculated as (R - I)/R.

[3] The list collection response rate is calculated as Completed/ (Total-Ineligible).

[4] The overall response rate is calculated by multiplying the graduate response rate by the list collection response rate.

[5] The degree and major codes are those reported by institutions at the time of sampling and may not match data reported by the respondents on the survey.

[6] This reflects the type of address provided by the institution at the time of sampling. Additional address information may have been provided by the alumni office during data collection. Graduates from whom both a U.S. and a foreign address were provided are included in the foreign address category.

[7] Sex codes were obtained from four sources: those reported on the survey, the title field (i.e., Mr., Ms.) on the sample file, coded from first name, and imputation. Imputation was done on 250 nonrespondents where sex could not be coded from the name.

SOURCE: National Science Foundation, 1993 National Survey of Recent College Graduates.

The weights developed for the NSRCG:93 comprise both full-sample weights for use in computing survey estimates and replicate weights for use on variance estimation with a jackknife replication variance estimation procedure.

DATA EDITING

Most editing checks were included within the CATI system, including range checks, skip pattern rules, and logical consistency checks. Skip patterns were controlled by the CATI system so that inappropriate items were avoided. For logical consistency check violations, CATI screens appeared that explained the discrepancy and asked the respondent for corrections. Some additional logical consistency checks were added during data preparation, and all edit checks were rerun after item nonresponse imputation.

IMPUTATION OF MISSING DATA

Missing data occur if the respondent cooperated with the survey but did not answer one or more individual questions. The item nonresponse for this study was very low (typically about 1 percent) as a result of using CATI for data collection and data retrieval techniques for missing key items. However, imputation for item nonresponse was performed for each survey item to make the study results simpler to present and to allow consistent totals to be obtained when analyzing different questionnaire items. "Not applicable" responses were not imputed since these represented respondents who were not eligible to answer the relevant item.

Imputation was performed using a hot-deck method. Hot-deck methods estimate the missing value of an item by using values of the same item from other record(s) in the same file. Using the hot-deck procedure, each missing questionnaire item was imputed separately. First, respondent records were sorted by items thought to be related to the missing item. Next, a value was imputed for each item nonresponse recipient from a respondent donor within the same subgroup. The results of the imputation procedure were reviewed to ensure that the plan had been followed correctly. In addition, all edit checks were run on the imputed file to be sure that no data inconsistencies were created by imputation.

For a more detailed discussion of survey methodology, readers are referred to the NSRCG: 93 data file User's Manual.

ACCURACY OF ESTIMATES

The survey estimates provided in these tables are subject to two sources of error: sampling and nonsampling errors. Sampling errors occur because the estimates are based on a sample of individuals in the population rather than on the entire population and hence are subject to sampling variability. If the interviews had been conducted with a different sample, the responses would not have been identical; some figures might have been higher, whereas others might have been lower.[1]

The standard error is the measure of the variability of the estimates arising from sampling. It indicates the variability of a sample estimate that would be obtained from all possible samples of a given design and size. Standard errors can be used as a measure of the precision expected from a particular sample. Tables A-3 to A-6 contain standard errors for key statistics included in the detailed tables.

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[1] A detailed discussion of nonsampling errors can be found at the end of this section starting on page 20.

Table A-3. Unweighted number, weighted estimate, and standard errors for 1991 science and engineering bachelor's degree recipients, by graduate characteristics: April 1993

Characteristic	Unweighted number	Weighted estimate			
		Weighted number	Standard error	Weighted percent	Standard error
Total 1991 science and engineering bachelor's degree recipients	4,857	308,500	8,400	100%	
Sex					
Male	3,180	170,900	6,100	55	1.10
Female	1,677	137,600	4,700	45	1.10
Race/ethnicity					
American Indian/Alaskan Native	11	1,000	400	*	0.14
Asian/Pacific Islander	384	23,100	2,000	8	0.60
Black, non-Hispanic	284	20,200	3,700	7	1.13
Hispanic	258	16,400	2,200	5	0.70
White, non-Hispanic	3,920	247,800	7,600	80	1.68
Type of major field					
Science	2,950	247,900	7,600	80	0.88
Engineering	1,907	60,600	2,900	20	0.88
Major field of study					
Computer and mathematical sciences	458	37,800	1,900	12	0.56
Life and related sciences	728	47,600	1,800	15	0.53
Physical and related sciences	683	16,200	600	5	0.23
Social and related sciences	1,081	146,300	6,200	47	1.06
Engineering	1,907	60,600	2,900	20	0.88
Occupation (total employed)	4,192	260,700	7,600	100	
Computer and mathematical scientists	278	20,700	1,400	8	0.54
Life and related scientists	139	9,400	900	4	0.36
Physical scientists	327	9,700	700	4	0.24
Social and related scientists	86	10,500	1,300	4	0.47
Engineers	1,356	41,500	1,900	16	0.70
Other occupations	2,006	169,000	6,500	65	1.01

* = Less than 0.5%

NOTE: Represents graduates from July 1990 through June 1991. Details may not add to totals because of rounding.

SOURCE: National Science Foundation, *National Survey of Recent College Graduates, 1993*

Table A-4. Unweighted number, weighted estimate, and standard errors of 1991 science and engineering master's degree recipients, by graduate characteristics: April 1993

Characteristic	Unweighted number	Weighted estimate			
		Weighted number	Standard error	Weighted percent	Standard error
Total 1991 science and engineering master's degree recipients	2,458	57,000	1,900	100%	
Sex					
Male	1,695	38,700	1,300	68	1.25
Female	763	18,300	1,000	32	1.25
Race/ethnicity					
American Indian/Alaskan Native	8	200	100	*	0.12
Asian/Pacific Islander	483	11,100	700	19	1.33
Black, non-Hispanic	84	2,500	500	4	0.82
Hispanic	94	2,000	200	4	0.38
White, non-Hispanic	1,789	41,200	1,900	72	1.45
Type of major field					
Science	1,438	36,900	1,900	65	1.30
Engineering	1,020	20,100	400	35	1.30
Major field of study					
Computer and mathematical sciences	267	13,000	1,500	23	1.94
Life and related sciences	312	6,900	400	12	0.51
Physical and related sciences	428	5,200	300	9	0.55
Social and related sciences	431	11,800	600	21	0.89
Engineering	1,020	20,100	400	35	1.30
Occupation (total employed)	2,202	51,700	1,800	100	
Computer and mathematical scientists	229	9,800	1,300	19	1.98
Life and related scientists	157	3,400	300	7	0.56
Physical scientists	316	4,000	300	8	0.56
Social and related scientists	187	4,900	400	9	0.82
Engineers	762	14,500	500	28	1.11
Other occupations	551	15,100	700	29	1.21

* = Less than 0.5%.

NOTE: Represents graduates from July 1990 through June 1991. Details may not add to totals because of rounding.

SOURCE: National Science Foundation, *National Survey of Recent College Graduates, 1993*

Table A-5. Unweighted number, weighted estimate, and standard errors for 1992 science and engineering bachelor's degree recipients, by graduate characteristics: April 1993

Characteristic	Unweighted number	Weighted estimate			
		Weighted number	Standard error	Weighted percent	Standard error
Total 1992 science and engineering bachelor's degree recipients	4,550	330,900	8,500	100%	
Sex					
Male	2,968	184,000	5,100	56	1.06
Female	1,582	146,900	5,800	44	1.06
Race/ethnicity					
American Indian/Alaskan Native	14	900	300	*	0.10
Asian/Pacific Islander	371	25,400	2,200	8	0.70
Black, non-Hispanic	277	23,900	4,100	7	1.20
Hispanic	208	13,800	1,500	4	0.50
White, non-Hispanic	3,680	266,900	7,600	81	1.60
Type of major field					
Science	2,889	273,200	7,900	83	0.40
Engineering	1,661	57,700	1,200	17	0.40
Major field of study					
Computer and mathematical sciences	452	39,800	1,900	12	0.50
Life and related sciences	692	52,100	2,600	16	0.82
Physical and related sciences	616	17,500	1,200	5	0.30
Social and related sciences	1,129	163,700	6,600	49	1.07
Engineering	1,661	57,700	1,200	17	0.40
Occupation (total employed)	3,912	279,700	7,700	100	
Computer and mathematical scientists	277	22,700	2,000	8	0.63
Life and related scientists	136	9,400	900	3	0.34
Physical scientists	282	9,400	800	3	0.23
Social and related scientists	74	10,300	1,400	4	0.47
Engineers	1,027	35,200	1,100	13	0.47
Other occupations	2,116	192,600	6,300	69	0.91

* = Less than 0.5 %.

NOTE: Represents graduates from July 1991 through June 1992. Details may not add to totals because of rounding.

SOURCE: National Science Foundation, *National Survey of Recent College Graduates, 1993*

Table A-6. Unweighted number, weighted estimate, and standard errors for 1992 science and engineering master's degree recipients, by graduate characteristics: April 1993

Characteristic	Unweighted number	Weighted estimate			
		Weighted number	Standard error	Weighted percent	Standard error
Total 1992 science and engineering master's degree recipients	2,509	58,600	1,600	100%	
Sex					
Male	1,705	37,900	1,200	65	1.08
Female	804	20,700	800	35	1.08
Race/ethnicity					
American Indian/Alaskan Native	7	200	100	*	0.12
Asian/Pacific Islander	542	13,100	700	22	1.18
Black, non-Hispanic	91	2,200	400	4	0.58
Hispanic	86	1,800	200	3	0.30
White, non-Hispanic	1,783	41,500	1,400	71	1.31
Type of major field					
Science	1,377	37,700	1,400	64	1.00
Engineering	1,132	20,900	600	36	1.00
Major field of study					
Computer and mathematical sciences	259	11,100	500	19	0.74
Life and related sciences	286	6,300	300	11	0.50
Physical and related sciences	387	5,400	400	9	0.48
Social and related sciences	445	14,900	800	25	1.04
Engineering	1,132	20,900	600	36	1.01
Occupation (total employed)	2,195	51,400	1,400	100	
Computer and mathematical scientists	237	8,200	500	16	1.02
Life and related scientists	145	3,300	300	6	0.54
Physical scientists	289	4,100	300	8	0.64
Social and related scientists	158	4,800	400	9	0.77
Engineers	803	15,100	600	29	1.04
Other occupations	563	15,900	800	31	1.27

* = Less than 0.5%.

NOTE: Represents graduates from July 1991 through June 1992. Details may not add to totals because of rounding.

SOURCE: National Science Foundation, *National Survey of Recent College Graduates, 1993*

Table A-7. Estimated parameters for computing generalized variances for estimates from the NSRCG: 93

Domain	Bachelor's recipients parameter estimates			Master's recipients parameter estimates		
	a[1]	b[1]	DEFF[2]	a[1]	b[1]	DEFF[2]
1991 graduates						
All graduates	0.000116	132.515	1.9	0.013208	11.064	1.6
Sex						
Male	0.001079	94.871	2.2	0.000354	38.915	1.8
Female	-0.000010	178.568	2.6	0.001214	37.876	1.8
Major						
Science majors	0.000411	178.903	2.8	0.002822	26.086	2.0
Engineering majors	0.000818	80.969	1.6	-0.001952	41.629	1.7
Occupation						
Scientists	-0.000872	131.591	1.8	0.003328	27.255	2.0
Engineers	-0.000045	82.807	1.2	-0.000006	27.478	1.4
Other occupations	0.000451	195.981	2.6	-0.000500	41.688	1.7
Race/ethnicity						
White, non-Hispanic	0.000718	120.830	3.6	0.001287	37.517	2.2
Black, non-Hispanic	0.032007	81.327	5.6	0.019705	43.892	2.9
Hispanic	0.006942	141.348	3.3	0.000230	26.526	1.2
Asian/Pacific Islanders	0.001170	124.246	2.2	0.002644	33.742	2.3
1992 graduates						
All graduates	0.006530	68.747	1.8	0.014906	9.977	1.4
Sex						
Male	0.000731	83.675	1.8	-0.000229	42.863	1.6
Female	0.000494	166.358	2.1	-0.000665	42.195	1.5
Major						
Science majors	0.000566	150.333	2.0	-0.001252	68.013	1.8
Engineering majors	-0.000971	72.909	0.7	-0.000408	28.939	1.2
Occupation						
Scientists	-0.000565	171.386	1.9	-0.000062	39.428	1.6
Engineers	-0.001254	73.203	0.8	0.000029	27.230	1.2
Other occupations	0.000117	188.939	1.9	0.000463	41.454	1.7
Race/ethnicity						
White, non-Hispanic	0.000746	88.749	2.9	-0.000806	55.473	1.9
Black, non-Hispanic	0.026867	128.155	5.7	0.015080	32.573	2.0
Hispanic	0.006141	121.118	2.2	-0.001975	25.648	1.0
Asian/Pacific Islanders	0.004119	106.541	2.2	0.001693	29.712	1.8

[1]/ See discussion of "Estimated Totals" on page 17 of the text.

[2]/ DEFF = design effect.

SOURCE: National Science Foundation, *National Survey of Recent College Graduates, 1993*

If all possible samples were surveyed under similar conditions, intervals within plus or minus 1.96 standard errors of a particular statistic would include the true population parameter being estimated in about 95 percent of the samples. This is the 95-percent confidence interval. For example, the total number of 1991 bachelor's degree recipients majoring in engineering is 60,600 and the estimated standard error is 2,900. The 95 percent confidence interval for the statistic extends from

$$60{,}600 - (2{,}900 \times 1.96) \text{ to } 60{,}660 + (2{,}900 \times 1.96) = 54{,}916 \text{ to } 66{,}284.$$

This means that one can be confident that intervals constructed in this way contain the true population parameter 95 percent of the time.

Estimates of standard errors were computed using a technique known as a jackknife replication. As with any replication method, jackknife replication involves constructing a number of subsamples (replicates) from the full sample and computing the statistics of interest for each replicate. The mean square error of the replicate estimates around their corresponding full sample estimate provides an estimate of the sampling variance of the statistic of interest. To construct the replications, 50 stratified subsamples of the full sample were created. Fifty jackknife replicates were then formed by deleting one subsample at a time from the full sample. WesVarPC, a public use computer program developed at Westat, was used to calculate direct estimates of standard errors for a number of statistics from the survey.

GENERALIZED VARIANCE FUNCTIONS

Computing and printing standard errors for each estimate from the survey is a time-consuming and costly effort. For this survey, a different approach was taken for estimating the standard errors of the estimates reported in this report. First, the standard errors for a large number of different estimates were directly computed using the jackknife replication procedures described above. Next, models were fitted to the estimates and standard errors and the parameters of these models were estimated from the direct estimates. These models and their estimated parameters can now be used to approximate the standard error of an estimate from the survey. This process is called the development of generalized variance functions. Models were fitted for the two types of estimates of primary interest: estimated totals and estimated percentages.

It should be noted that the models used to estimate the generalized variance functions may not be completely appropriate for all estimates. When it is feasible, direct estimates of the standard errors should be computed using the replication method. This process is relatively simple since replicate weights and software such as WesVarPC are available.

ESTIMATED TOTALS

For estimated totals, the generalized variance function applied assumes that the relative variance of the estimate (the square of the standard error divided by the square of the estimate) is a linear function of the inverse of the estimate. Using this model, the standard error of an estimate can be computed as

$$se(y) = \sqrt{ay^2 + by} \qquad (1)$$

where se(y) is the standard error of the estimate y, and a and b are estimated parameters of the model. The parameters of the models were computed separately for 1991 bachelor's and master's recipients and for 1992 bachelor's and master's recipients, as well as for other important domains of interest. The estimates of the parameters are given in Table A-7.

The following steps should be followed to approximate the standard error of an estimated total:

1) obtain the estimated total from the survey,

2) determine the most appropriate domain for the estimate from Table A-7,

3) refer to Table A-7 to get the estimates of a and b for this domain, and

4) compute the generalized variance using equation (1) above.

For example, suppose that the number of 1991 bachelor's degree recipients in engineering who were currently working in an engineering-related job was 40,000 ($y = 40{,}000$). The most appropriate domain from Table A-7 is engineering majors with bachelor's degrees from 1991 and the parameters are a = 0.000818 and b = 80.969. Approximate the standard error using equation (1) as

$$se(40{,}000) = \sqrt{.000818(40{,}000)^2 + 80.969(40{,}000)} = 2{,}133$$

ESTIMATED PERCENTAGES

The model used to approximate the standard errors for estimates of percentages was somewhat less complex than the model to estimate totals. The generalized variance for estimated percentages assumed that the ratio of the variance of an estimate to the variance of the same estimate from a simple random sample of the same size was a constant. This ratio is called the design effect and is often labeled the DEFF. Since the variance for an estimated percentage, p, from a simple random sample is $p(100\text{-}p)$ divided by the sample size, the standard error of an estimated percentage can be written as

$$se(p) = \sqrt{DEFF(p)(100\text{-}p)/n} \qquad (2)$$

where n is the sample size or denominator of the estimated percentage. DEFFs were computed separately for 1991 bachelor's and master's recipients and for 1992 bachelor's and master's recipients, as well as for other important domains of interest. The median or average value of the DEFFs from these computations are given in Table A-7.

The following steps should be followed to approximate the standard error of an estimated percentage:

1) obtain the estimated percentage and sample size from the survey,

2) determine the most appropriate domain for the estimate from Table A-7,

3) refer to Table A-7 to get the estimates of the DEFF for this domain, and

4) compute the generalized variance using equation (2) above.

For example, suppose that the percentage of 1991 bachelor's degree recipients in engineering who were currently working in an engineering-related job was 60 percent (p = 60) and the number of engineering majors from the survey was 1,907. The most appropriate domain from Table A-7 is engineering majors with bachelor's degrees from 1991 and the DEFF for this domain is 1.6. Approximate the standard error using equation (2) as

$$se(60\%) = \sqrt{1.6(60)(100 - 60)/1907} = 1.4\%$$

NONSAMPLING ERRORS

In addition to sampling errors, the survey estimates are subject to nonsampling errors that can arise because of nonobservation (nonresponse or noncoverage), reporting errors, and errors made in the collection and processing of the data. These errors can sometimes bias the data. The NSRCG:93 included procedures for both minimizing and measuring nonsampling errors.

Procedures to minimize nonsampling errors were followed throughout the survey. Extensive questionnaire design work was done by Mathematica Policy Research (MPR), NSF, and Westat. This work included focus groups, expert panel reviews, and a mail and CATI pretest. The design work was done in conjunction with the other two SESTAT surveys.

Strict training and monitoring of interviewers and data processing staff were conducted to help ensure the consistency and accuracy of the data file. Data collection was done almost entirely by telephone to help reduce the amount of item nonresponse and item inconsistency. Mail questionnaires were used for cases difficult to complete by telephone. Nonresponse was handled in ways designed to minimize the impact on data quality (through weighting adjustments and imputation). In data preparation a special effort was made in the area of occupational coding. All respondent-chosen codes were verified by data preparation staff using a variety of information collected on the survey and applying coding rules developed by NSF for the SESTAT system.

Although general sampling theory can be used to estimate the sampling variability of a statistic, the measurement of nonsampling error is not easy and usually requires that an experiment be conducted as part of the data collection, or that data external to the study be used. For NSRCG:93, two data quality studies were completed: (1) an analysis of interviewer variance, and (2) a behavioral coding analysis of 100 recorded interviews. The interviewer variance study was designed to measure how interviewer effects might have affected the precision of the estimates. The results showed that interviewer effects for most items were minimal and thus had a very limited effect on the standard error of the estimates. Interviewer variance was highest for open-ended questions.

The behavioral coding study was done to observe the extent to which interviewers were following the structured interview and the extent to which it became necessary for them to give unstructured additional explanation or comment to respondents. As part of the study, 100 interviews were taped and then coded on a variety of behavioral dimensions. This analysis revealed that on the whole the interview proceeded in a very structured manner with 85 percent of all questions and answers being "asked and answered only." Additional unstructured interaction/discussion took place most frequently for those questions in which there was some ambiguity in the topic. In most cases this interaction was judged to have facilitated obtaining the correct response.

Both the recorded interview and the variance study were used to identify those questionnaire items that might need additional revision for the next (1995) study cycle. A debriefing session concerning the survey was held with interviewers, and this information was also used in revising the survey for the 1995 cycle. In addition, results from a reinterview conducted by the Census Bureau for the NSCG were reviewed in this regard.

COMPARISONS OF DATA WITH PREVIOUS YEARS' RESULTS

A word of caution needs to be given concerning comparisons with previous NSRCG results. For 1993, the SESTAT system underwent considerable revision in all areas, including survey eligibility, data collection procedures, questionnaire content and wording, and data coding and editing procedures.

Among the important changes for 1993 that may affect comparisons with previous years' survey results are the following:

- **The exclusion from eligibility of those living in foreign countries during the reference week.** For NSRCG:93 and the other SESTAT 1993 surveys, those who were living outside the United States on the reference date for the survey (April 15, 1993) were not considered eligible for the study. This was not the case in previous NSRCG cycles.

- **Changes in the major fields represented.** Certain majors included in previous cycles were not included in this NSRCG cycle. For example, among the majors eligible in 1990 but not included in 1993 were computer programming (computer science was, however, eligible), actuarial science, engineering technologies, farm management, horticulture operations/management, business-related information systems/services, operations research, science education, math education, social science education, engineering education, criminal justice, city and regional planning, and conservation, natural resources, wildlife management, and forestry production. Appendix A presents a listing of eligible and ineligible majors for 1993 with a cross-reference to the Department of Education's standard Classification of Instructional Programs (CIP).

- **Higher response rates and the CATI data collection method.** The higher response rates obtained in 1993 may result in some change in estimates for certain statistics. Previous data collections have had response rates of 65-73 percent. It may be that those responding may have been more likely to be employed and to be employed in science and engineering. Previous studies were primarily mail with telephone followup. Mode effects may cause differences for some questions.

- **Changes in the salary question.** In previous cycles, annual or academic-year income was requested. In 1993, the respondent was given the choice to answer in hours, weeks, months, years, or academic years. Annual income was then calculated for all respondents. There was also a difference in the way academic-year salaries were handled. In the 1990 survey, academic-year salaries were inflated (multiplied by 11/9). In the 1993 cycle, the academic-year salaries were left as reported. Because of data quality issues for the self-employed for the entire SESTAT system, full-time salary data included in this report exclude those for the self-employed. Those reporting they were full-time students on the reference date were also excluded from salary data reported for NSRCG.

- **The development for 1993 of separate systems of classification for occupation and major field of study.** In previous NSRCG study years, the major and job (employment) lists were combined, and each was somewhat less specific than in 1993. For the 1993 survey, the major field list was made more comparable with the Department of Education's CIP, and the occupation list was made more comparable with the Standard Occupational Classification (SOC) codes. Thus, the NSRCG data on the number and percent working in science and engineering occupations are not comparable with previous years' results. Exhibits 1 to 4 display listings of the major and job category lists used in the survey and the summary classifications used in the tables.

- **The development of standard SESTAT coding and classification rules with regard to occupations such as managers, teachers, computer occupations, and other occupations.** For NSRCG: 93 certain SESTAT rules were followed in assigning a best code for occupations. These rules, combined with the new occupational coding list, resulted in fewer persons being categorized as employed in science and engineering occupations. For example, those that supervised more than five persons through subordinate supervisors were usually classified as top- or mid-level managers. Those who reported computer programming as their occupation were grouped with technicians in summary occupation tables. Many of these individuals would have been classified as scientists or engineers in the previous cycles in which the major field and employment field lists were combined.

COMPARISONS WITH U.S. DEPARTMENT OF EDUCATION DATA

In weighting the NSRCG: 93 data, ratio adjustments were made at the institution level to Integrated Postsecondary Educational Data System (IPEDS) estimates. However, because of the special NSF eligibility requirements and use of differing summary classification systems, the estimates given in these sets of tables do not correspond directly to tables reported for IPEDS. There are two major reasons for these differences: (1) the exclusions from the NSRCG of certain groups, primarily those living outside of the United States on the reference date and those over 75 years of age; and (2) the exclusion from the NSRCG sample of certain majors. It should also be noted that IPEDS is based on administrative records and NSRCG on respondent classification.

OTHER EXPLANATORY INFORMATION

Coverage of tables. In this report's tables information is presented for the 1991 and 1992 bachelor's and master's degree cohorts (academic years 1990-91 and 1991-92). Information for the 1990 cohort was collected primarily for inclusion in the SESTAT longitudinal studies and hence did not cover an entire year, but only that part of the cohort not represented in the 1990 decennial census (those graduating from April 1990 to June 1990).

The following definitions are provided to facilitate the reader's use of the data in this report.

Major field of study: Derived from the survey major field category most closely related to the respondent's degree field. Exhibit 1 is a listing of the detailed major field codes used in the survey. Exhibit 2 is a listing of the summary major field codes developed by NSF and used in the tables. A listing of the eligible and ineligible major fields within each summary category appears in the appendix.

Occupation: Derived from the survey job list category most closely related to the respondent's primary job. Exhibit 3 is a listing of the detailed job codes used in the survey, and Exhibit 4 is a summary of the occupation codes developed by NSF and used in the tables.

Labor force: The labor force includes individuals working full or part time as well as those not working but seeking work or on layoff. It is a sum of the employed and the unemployed.

Unemployed: The unemployed are those who were not working on April 15 and were seeking work or on layoff from a job.

Involuntarily out of field: Those respondents who are involuntarily out of field either: (1) have a job not related to degree field and have indicated they took a job because suitable work in a degree field was not available, or (2) are employed part time and took part-time work only because suitable full-time work was not available.

Type of employer: This is the sector of employment in which the respondent was working on his or her primary job on April 15, 1993. In this categorization, those working in 4-year colleges and universities or university-affiliated medical schools or research organizations were classified as employed in the "4-year college and university" sector. Those working in elementary, middle, secondary, or 2-year colleges or other educational institutions were categorized in the group "other educational." The other sectors are private, for profit, self-employed, nonprofit organizations, federal government, and state or local government. Those reporting that they were self-employed but in an incorporated business were classified in the private, for-profit sector.

Primary and secondary work activities: These refer to activities that occupied the most time and the second-most time on the respondent's job. In reporting the data, those who reported applied research, basic research, development, or design work were grouped together in "research and development (R&D)." Those who reported teaching were given the code "teaching." Those who reported accounting, finance or contracts, employee relations, quality or productivity management, sales and marketing, or management or administration were grouped into "management, sales, administration." Those who reported computer applications were placed in "computer applications." Those who reported production, operation maintenance, or professional services or other activities were given the code "other."

Full-time salary: This is the annual income for the full-time employed who were not self-employed and who were not full-time students on the reference date (April 15, 1993). To annualize salary, reported hourly salaries were multiplied by 2080, reported weekly salaries were multiplied by 52, and reported monthly salaries were multiplied by 12. Yearly and academic-yearly salaries were left as reported.

Exhibit 1

LIST A. EDUCATION CODES

This EDUCATION CODES list is ordered alphabetically. The titles in bold type are broad fields of study. To make sure you have found the BEST code, please review ALL broad categories before making your choice. If you cannot find the code that BEST describes your field of study, use the "OTHER" code under the most appropriate broad field in bold print. If none of the codes fit your field of study, use Code 995.

Agriculture Business and Production

601 Agriculture, economics (also see 655 and 923)
602 OTHER, agricultural business and production

Agricultural Sciences

605 Animal sciences
606 Food sciences and technology (also see 638)
607 Plant sciences (also see 633)
608 OTHER, agricultural sciences

610 Architecture/Environmental Design

(for architectural engineering, see 723)

620 Area/Ethnic Studies

Biological/Life Sciences

631 Biochemistry and biophysics
632 Biology, general
633 Botany (also see 607)
634 Cell and molecular biology
635 Ecology
636 Genetics, animal and plant
637 Microbiology
638 Nutritional sciences (also see 606)
639 Pharmacology, human and animal (also see 788)
640 Physiology, human and animal
641 Zoology, general
642 OTHER, biological sciences

Business Management/Administrative Services

651 Accounting
652 Actuarial science
653 Business administration and management
654 Business, general
655 Business/managerial economics (also see 601 and 923)
656 Business marketing/marketing mgmt.
657 Financial management
658 Marketing research
843 Operations research
659 OTHER, business management/admin. services

Communications

661 Communications, general
662 Journalism
663 OTHER, communications

Computer and Information Sciences

671 Computer/information sciences, general
672 Computer programming
673 Computer science (also see 727)
674 Computer systems analysis
675 Data processing technology
676 Information services and systems
677 OTHER, computer and information sciences

Conservation/Renewable Natural Resources

680 Environmental science studies
681 Forestry sciences
682 OTHER, conservation/renewable natural resources

690 Criminal Justice/Protective Services

(also see 922)

Education

701 Administration
702 Computer teacher education
703 Counselor education/guidance services
704 Educational psychology
705 Elementary teacher education
706 Mathematics teacher education
707 Physical education/coaching
708 Pre-elementary teacher education

Exhibit 1 (continued)

LIST A: EDUCATION CODES (CONTINUED)

709 Science teacher education
710 Secondary teacher education
711 Special education
712 Social science teacher education
713 OTHER, education

Engineering

721 Aerospace, aeronautical, astronautical
722 Agricultural
723 Architectural
724 Bioengineering and biomedical
725 Chemical
726 Civil
727 Computer/systems (also see 673)
728 Electrical, electronics, communications (also see 751)
729 Engineering sciences, mechanics, physics
730 Environmental
731 General
732 Geophysical
733 Industrial (also see 752)
734 Materials, including ceramics and textiles
735 Mechanical (also see 753)
736 Metallurgical
737 Mining and minerals
738 Naval architecture and marine
739 Nuclear
740 Petroleum
741 OTHER, engineering

Engineering-Related Technologies

751 Electrical and electronic technologies
752 Industrial production technologies
753 Mechanical engineering-related technologies
754 OTHER, engineering-related technologies

760 English Language and Literature/Letters

(for Linguistics, see 771)

Foreign Languages and Literature

771 Linguistics
772 OTHER, foreign languages and literature

Health Professions and Related Sciences

781 Audiology and speech pathology
782 Health services administration
783 Health/medical assistants
784 Health/medical technologies
785 Medical preparatory programs (e.g., pre-dentistry, pre-medical, pre-veterinary)
786 Medicine (e.g., dentistry, optometry, osteopathic, podiatry, veterinary)
787 Nursing (4 years or longer program)
788 Pharmacy (also see 639)
789 Physical therapy and other rehabilitation/therapeutic services
790 Public health (including environmental health and epidemiology)
791 OTHER, health/medical sciences

800 Home Economics

810 Law/Prelaw/Legal Studies

820 Liberal Arts/General Studies

830 Library Science

Mathematics

841 Applied (also see 843, 652)
842 Mathematics, general
843 Operations research
844 Statistics
845 OTHER, mathematics

850 Parks, Recreation, Leisure, and Fitness Studies

Philosophy, Religion, and Theology

861 Philosophy of science
862 OTHER, philosophy, religion, theology

Physical Sciences

871 Astronomy and astrophysics
872 Atmospheric sciences and meteorology
631 Biochemistry and biophysics
873 Chemistry
874 Earth sciences

Exhibit 1 (continued)

CATION CODES (CONTINUED)

680	Environmental science studies
875	Geology
876	Geological sciences, other
877	Oceanography
878	Physics
879	OTHER, physical sciences

Psychology

891	Clinical
892	Counseling
704	Educational
893	Experimental
894	General
895	Industrial/Organizational
896	Social
897	OTHER, psychology

Public Affairs

901	Public administration
902	Public policy studies
903	OTHER, public affairs

910 Social Work

Social Sciences and History

921	Anthropology and archeology
922	Criminology (also see 690)
923	Economics (also see 601 and 655)
924	Geography
925	History of science
926	History, other
927	International relations
928	Political science and government
929	Sociology
930	OTHER, social sciences

Visual and Performing Arts

941	Dramatic arts
942	Fine arts, all fields
943	Music, all fields
944	OTHER, visual and performing arts

991	**Other science/engineering**
995	**Other Fields - Not Listed**

Exhibit 2.

[illegible] CATEGORIES FOR TABULATIONS

1. Computer and mathematical sciences

11 Computer and information sciences 671, 673, 674, 676, 677
12 Mathematical sciences 841-845

2. Life and related sciences

21 Agricultural and food sciences 605-608
22 Biological sciences 631-642, (781-791 Ph.D. degree only-eligible for SDR survey only, not NSRCG), 991
23 Environmental life sciences including forestry sciences 680, 681

3. Physical and related sciences

31 Chemistry 873
32 Earth sciences, geology, oceanography 872, 874-877
33 Physics and astronomy 871, 878
34 Other physical sciences 879

4. Social sciences and related sciences

41 Economics 601, 923
42 Political and related sciences 902, 927, 928
43 Psychology 704*, 891*, 892-897,
44 Sociology and anthropology 921, 922*, 929
45 Other social sciences 620*,771, 861, 924, 925, 930

5. Engineering

51 Aerospace and related engineering 721
52 Chemical engineering 725
53 Civil and related engineering 723, 726
54 Electrical, electronic, computer, and communications engineering 727, 728
55 Industrial engineering 733
56 Mechanical engineering 735
57 Other engineering 722, 724, 729-732, 734, 736-741

6. 60 Other majors

602, 610, 651-659, 661-663, 672, 675, 682, 690, 701-703, 705-713, 751-754, 760, 772, 781-791^{x}, 800, 810, 820, 830, 850, 862, 901, 903, 910, 926, 941-944, 995

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* The categories area and ethnic studies (620), educational psychology (704), clinical psychology (891), school psychology (part of 897), archeology (part of 921), and criminology (922), were not sampled for the 1993 NSRCG.

x At the BA, MA, or professional level

SOURCE: National Science Foundation, *1993 National Survey of Recent College Graduates*

Exhibit 3.

This JOB CODES list is ordered alphabetically. The titles in bold type are broad job categories. To make sure you have found the BEST code, please review ALL broad categories before making your choice. If you cannot find the code that BEST describes your job, use the "OTHER" code under the most appropriate broad category in bold print. If none of the codes fit your job, use Code 500.

010 **Artists, Broadcasters, Editors, Entertainers, Public Relations Specialists, Writers**

Biological/Life Scientists
021 Agricultural and food scientists
022 Biochemists and biophysicists
023 Biological scientists (e.g., botanists, ecologists, zoologists)
024 Forestry, conservation scientists
025 Medical scientists (excluding practitioners)
026 Technologists & technicians in the biological/life sciences
027 OTHER biological/life scientists

Clerical/Administrative Support
031 Accounting clerks, bookkeepers
032 Secretaries, receptionists, typists
033 OTHER administrative (e.g., record clerks, telephone operators)

040 **Clergy & Other Religious Workers**

Computer Occupations (Also see 173)
*** Computer engineers (See 087, 088 under Engineering)
051 Computer programmers (business, scientific, process control)
052 Computer system analysts
053 Computer scientists, except system analysts
054 Information systems scientists or analysts
055 OTHER computer, information science occupations

*** **Consultants** (select the code that comes closest to your usual area of consulting)

070 Counselors, Educational & Vocational (Also see 236)

Engineers, Architects, Surveyors
081 Architects

*** Engineers (Also see 100-103)
082 Aeronautical, aerospace, astronautical
083 Agricultural
084 Bioengineering & biomedical
085 Chemical
086 Civil, including architectural & sanitary
087 Computer engineer - hardware
088 Computer engineer - software
089 Electrical, electronic
090 Environmental
091 Industrial
092 Marine engineer or naval architect
093 Materials or metallurgical
094 Mechanical
095 Mining or geological
096 Nuclear
097 Petroleum
098 Sales
099 Other engineers

*** Engineering Technologists and Technicians
100 Electrical, electronic, industrial, mechanical
101 Drafting occupations, including computer drafting
102 Surveying and mapping
103 OTHER engineering technologists and technicians
104 Surveyors

110 **Farmers, Foresters & Fishermen**

Health Occupations

Exhibit 3. (continued)

LIST B. JOB CODES (CONTINUED)

111 Diagnosing/Treating Practitioners (e.g., dentists, optometrists, physicians, psychiatrists, podiatrists, surgeons, veterinarians)
112 Registered nurses, pharmacists, dieticians, therapists, physician assistants
113 Health Technologists & Technicians (e.g., dental hygienists, health record technologist/technicians, licensed practical nurses, medical or laboratory technicians, radiologic technologists/technicians)
114 OTHER health occupations

120 **Lawyers, Judges**

130 **Librarians, Archivists, Curators**

Managers, Executives, Administrators

(Also see 151-153)
141 Top and mid-level managers, executives, administrators (people who manage other managers)
*** All other managers, including the self-employed – Use the code that comes closest to the field you manage.

Management-Related Occupations

(Also see 141)
151 Accountants, auditors, and other financial specialists
152 Personnel, training, and labor relations specialists
153 OTHER management related occupations

Mathematical Scientists

171 Actuaries
172 Mathematicians
173 Operations research analysts, modelling
174 Statisticians
175 Technologists and technicians in the mathematical sciences
176 OTHER mathematical scientists

Physical Scientists

191 Astronomers
192 Atmospheric and space scientists
193 Chemists, except biochemists
194 Geologists, including earth scientists
195 Oceanographers
196 Physicists
197 Technologists and technicians in the physical sciences
198 OTHER physical scientists

*****Research Associates/**Assistants (Select the code that comes closest to your field)

Sales and Marketing

200 Insurance, securities, real estate, & business services
201 Sales Occupations - Commodities Except Retail (e.g., industrial machinery/equipment/supplies, medical and dental equip/supplies)
202 Sales Occupations - Retail (e.g., furnishings, clothing, motor vehicles, cosmetics)
203 OTHER marketing and sales occupations

Service Occupations, Except Health

(Also see 111-114)
221 Food Preparation and Service (e.g., cooks, waitresses, bartenders)
222 Protective services (e.g., fire fighters, police, guards)
223 OTHER service occupations, except health

Social Scientists

231 Anthropologists
232 Economists
233 Historians, science and technology
234 Historians, except science and technology
235 Political scientists
236 Psychologists, including clinical (Also see 070)
237 Sociologists
238 OTHER social scientist

240 **Social Workers**

Teachers/Professors

Exhibit 3. (continued)

[redacted]

251	Pre-Kindergarten and kindergarten
252	Elementary
253	Secondary - computer, math, or sciences
254	Secondary - social sciences
255	Secondary - other subjects
256	Special education - primary and secondary
257	OTHER precollegiate area
***	Postsecondary
271	Agriculture
272	Art, Drama, and Music
273	Biological Sciences
274	Business Commerce and Marketing
275	Chemistry
276	Computer Science
277	Earth, Environmental, and Marine Science
278	Economics
279	Education
280	Engineering
281	English
282	Foreign Language
283	History
284	Home Economics
285	Law
286	Mathematical Sciences
287	Medical Science
288	Physical Education
289	Physics
290	Political Science
291	Psychology
292	Social Work
293	Sociology
294	Theology
295	Trade and Industrial
296	OTHER health specialties
297	OTHER natural sciences
298	OTHER social sciences
299	OTHER Postsecondary

Other Professions

401	Construction trades, miners & well drillers
402	Mechanics and repairers
403	Precision/production occupations (e.g., metal workers, woodworkers, butchers, bakers, printing occupations, tailors, shoemakers, photographic process)
404	Operators and related occupations (e.g., machine set-up, machine operators and tenders, fabricators, assemblers)
405	Transportation/material moving occupations
500	**Other Occupations (Not Listed)**
501	**Teaching in non-school setting**
502	**Legal technician**

Exhibit 4.

NSF OCCUPATIONAL CODE CATEGORIES FOR TABULATIONS

1. Computer and mathematical scientists

11 Computer and information scientists 052-055, 088
12 Mathematical scientists 172-174, 176
13 Postsecondary teachers in computer and mathematical sciences 276, 286

2. Life and related scientists

21 Agricultural and food scientists 021
22 Biological scientists 022, 023, 025, 027
23 Environmental life scientists including forestry scientists 024
24 Postsecondary teachers in life and related sciences 273, 271, 287, 297

3. Physical and related scientists

31 Chemists, except biochemists 193
32 Earth scientists, geologists, and oceanographers 192, 194, 195
33 Physicists and astronomers 191, 196
34 Other physical scientists 198
35 Postsecondary teachers in physical and related sciences 289, 277, 275

4. Social and related scientists

41 Economists 232
42 Political scientists 235
43 Psychologists 236
44 Sociologists and anthropologists 231, 237
45 Other social scientists 238, 233
46 Postsecondary teachers in social and related sciences 278, 291, 290, 293, 298

5. Engineers

51 Aerospace and related engineers 082
52 Chemical engineers 085
53 Civil and related engineers 086
54 Electrical, electronic, computer, and communications engineer 087, 089
55 Industrial engineers 091
56 Mechanical engineers 094
57 Other engineers 083, 084, 090, 092-093, 095-097, 099, 098
58 Postsecondary teachers in engineering 280

Exhibit 4. (continued)

OCCUPATIONAL CODE CATEGORIES FOR TABULATIONS (CONTINUED)

6. All other occupations (occupations other than S&E)

61 Managers and management-related occupations, 141, 151-153
62 Health and related occupations, 111-114
63 Educators other than postsecondary in science and engineering 253-254, 251-252, 255-257, 272, 274 279 281-85, 288, 292, 294-296, 299
64 Social services and related occupations 240 070 040
65 Technicians including computer programmers 026, 175 197, 100-104, 081, 051
66 Sales and marketing 200-203
67 Other occupations 010, 031-033, 120, 130, 110, 500 (501-502), 171, 234, 221-223, 401-405

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APPENDIX A

ELIGIBLE AND INELIGIBLE MAJORS: 1993

ELIGIBLE SCIENCE AND ENGINEERING FIELDS

CATEGORIES & FIELDS	1993 NSF CODE	1990 CIP CODE
1. Computer and Mathematical Sciences		
11 COMPUTER & INFO SCIENCE		
COMPUTER & INFO SCI, GEN	671	11.0101
COMPUTER SCIENCE	673	11.0701
COMPUTER SYSTEMS ANALYSIS	674	11.0501
INFORMATION SCI & SYSTEMS	676	11.0401
COMPUTER & INFO SCI, OTHER	677	11.9999
12 MATHEMATICAL SCIENCES		
APPLIED MATH, GEN	841	27.0301
APPLIED MATH, OTHER	"	27.0399
MATHEMATICS, GENERAL	842	27.0101
OPERATIONS RESEARCH	843	27.0302
MATHEMATICAL STATISTICS	844	27.0501
MATHEMATICS, OTHER	845	27.9999
MATH & COMPUTER SCI	"	30.0801
2. Life and Related Sciences		
21 AGRICULTURAL & FOOD SCI		
ANIMAL SCIENCE	605	02.0201-02.0299
FOOD SCIENCES & TECHN	606	02.0301
PLANT SCIENCE	607	02.0401-02.0499
SOIL SCIENCE	608	02.0501
AGRICULTURE SCI, OTHER	"	02.9999
AGRICULTURE SCIENCE, GEN	"	02.0101-02.0102
22 BIOLOGICAL SCIENCES		
BIOCHEMISTRY & BIOPHYSICS	631	26.0202-26.0203
BIOLOGY, GEN	632	26.0101
BOTANY	633	26.0301-26.0399
CELL & MOLECULAR BIOLOGY	634	26.0401-26.0499
ECOLOGY	635	26.0603
GENETICS, ANIMAL & PLANT	636	26.0613
MICROBIOLOGY/BACTERIOLOGY	637	26.0501
NUTRITIONAL SCIENCES	638	26.0609
PHARMACOLOGY, HUMAN & ANIMAL	639	26.0705
PHYSIOLOGY, HUMAN & ANIMAL	640	26.0706
ZOOLOGY, GEN	641	26.0701
ENTOMOLOGY	"	26.0702
PATHOLOGY, HUMAN & ANIMAL	"	26.0704
ZOOLOGY, OTHER	"	26.0799

	1993 NSF CODE	1990 CIP CODE
ANATOMY	642	26.0601
MARINE/AQUATIC BIOLOGY	"	26.0607
NEUROSCIENCE	"	26.0608
PARASITOLOGY	"	26.0610
RADIATION BIOLOGY/RADIOBIOLOGY	"	26.0611
TOXICOLOGY	"	26.0612
BIOMETRICS	"	26.0614
BIOSTATISTICS	"	26.0615
BIOTECHNOLOGY RESEARCH	"	26.0616
EVOLUTIONARY BIOLOGY	"	26.0617
BIOLOGICAL IMMUNOLOGY	"	26.0618
VIROLOGY	"	26.0619
MISC BIOLOGICAL, OTHER	"	26.0699
BIOLOGICAL SCIENCE, OTHER	"	26.9999
BIOLOGICAL & PHYS SCI	991	30.0101
SYSTEMS SCIENCE & THEORY	"	30.0601
23 ENVIRONMENTAL & FORESTRY SCI		
ENVIRONMENTAL SCIENCE	680	03.0102
FORESTRY SCIENCE	681	03.0502
3. Physical and Related Sciences		
31 CHEMISTRY		
CHEMISTRY	873	40.0501-40.0599
32 EARTH SCI, GEO, OCEAN		
ATMOSPHERIC SCI & METEOR	872	40.0401
EARTH & PLANETARY SCI	874	40.0703
GEOLOGY	875	40.0601
GEOCHEMISTRY	876	40.0602
GEOPHYSICS & SEISMOLOGY	"	40.0603
PALEONTOLOGY	"	40.0604
GEOLOGICAL SCI, OTHER	"	40.0699
OCEANOGRAPHY	877	40.0702
33 PHYSICS & ASTRONOMY		
ASTRONOMY	871	40.0201
ASTROPHYSICS	"	40.0301
PHYSICS	878	40.0801-40.0899
34 OTHER PHYSICAL SCIENCE		
PHYSICAL SCIENCE, GENERAL	879	40.0101
METALLURGY	"	40.0701
MISC PHYSICAL SCI, OTHER	"	40.0799
PHYSICAL SCIENCE, OTHER	"	40.9999

	1993 NSF CODE	1990 CIP CODE
4. Social Sciences and Related Sciences		
41 ECONOMICS		
AGRICULTURE ECONOMICS	601	01.0103
ECONOMICS	923	45.0601-45.0699
42 POLITICAL & RELATED SCI		
PUBLIC POLICY ANALYSIS	902	44.0501
INTERNATIONAL REL & AFF	927	45.0901
POLITICAL SCI & GOVT	928	45.1001-45.1003
43 PSYCHOLOGY		
* EDUCATIONAL PSYCHOLOGY	704	13.0802
* CLINICAL PSYCHOLOGY	891	42.0201
COUNSELING PSYCHOLOGY	892	42.0601
EXPERIMENTAL PSYCHOLOGY	893	42.0801
GENERAL PSYCHOLOGY	894	42.0101
INDUSTRIAL/ORGANIZATIONAL PSY	895	42.0901
SOCIAL PSYCHOLOGY	896	42.1601
PSYCHOLOGY, OTHER	897	42.9999
COGNITIVE PSYCHOLOGY	"	42.0301
COMMUNITY PSYCHOLOGY	"	42.0401
DEVELOPMENTAL & CHILD PSY	"	42.0701
PHYSIOLOGICAL PSYCHOLOGY	"	42.1101
* SCHOOL PSYCHOLOGY	"	42.1701
BIOPSYCHOLOGY	"	30.1001
44 SOCIOLOGY & ANTHROPOLOGY		
ANTHROPOLOGY	921	45.0201
* ARCHEOLOGY	"	45.0301
* CRIMINOLOGY	922	45.0401
SOCIOLOGY	929	45.1101

*These were not sampled in 1993; however, they were included as eligible.

45 OTHER SOCIAL SCIENCES		
* AREA STUDIES	620	05.0101-05.0199
* ETHNIC & CULTURAL STUDIES	"	05.0201-05.0299
* AREA,ETHNIC,CULT, OTHER	"	05.9999
LINGUISTICS	771	16.0102
PHILOSOPHY OF SCIENCE	861	45.0804 (PART)
GEOGRAPHY	924	45.0701-45.0702
HISTORY OF SCIENCE	925	45.0804 (PART)
URBAN AFFAIRS/STUDIES	930	45.1201
SOCIAL SCIENCE, OTHER	"	45.9999
SOCIAL SCIENCES, GEN	"	45.0101
DEMOGRAPHY & POP STUDIES	"	45.0501
PEACE & CONFLICT STUDIES	"	30.0501
GERONTOLOGY	"	30.1101
SCIENCE, TECHN, & SOCIETY	"	30.1501

	1993 NSF CODE	1990 CIP CODE
5. Engineering	"	
51 AERO & ASTRO ENGINEERING		
AERO & ASTRO ENGIN	721	14.0201
52 CHEMICAL ENGINEERING		
CHEMICAL ENGIN	725	14.0701
53 CIVIL & RELATED ENGIN		
CIVIL ENGINEERING	726	14.0801-14.0899
ARCHITECTURAL ENGIN	723	14.0401
54 ELECTRICAL & COMPUTER ENG		
COMPUTER ENGIN	727	14.0901
SYSTEMS ENGIN	"	14.2701
ELECTRIC,ELECTRON,COMM	728	14.1001
55 INDUSTRIAL ENGINEERING		
INDUSTRIAL ENGIN	733	14.1701
56 MECHANICAL ENGINEERING		
MECHANICAL ENGIN	735	14.1901
57 OTHER ENGINEERING		
AGRICULTURAL ENGIN	722	14.0301
BIOENGIN & BIOMED ENGIN	724	14.0501
ENGINEERING MECHANICS	729	14.1101
ENGINEERING PHYSICS	"	14.1201
ENGINEERING SCIENCE	"	14.1301
ENVIRONMENTAL ENGIN	730	14.1401
ENGIN, GEN	731	14.0101
GEOPHYSICAL ENGIN	732	14.1601
MATERIALS ENGIN	734	14.1801
CERAMIC SCI & ENGIN	"	14.0601
TEXTILE SCI & ENGIN	"	14.2801
POLYMER/PLASTICS ENGIN	"	14.3201
METALLURGICAL ENGIN	736	14.2001
MINING & MINERAL ENGIN	737	14.2101
NAVAL ARCH & MARINE ENGIN	738	14.2201
NUCLEAR ENGIN	739	14.2301
PETROLEUM ENGIN	740	14.2501
ENGINEERING DESIGN	741	14.2901
ENGIN/INDUST MANAGEMENT	"	14.3001
MATERIALS SCIENCE	"	14.3101
GEOLOGICAL ENGIN	"	14.1501
OCEAN ENGIN	"	14.2401
ENGINEERING, OTHER	"	14.9999

*These were not sampled in 1993; however, they were included as eligible.

INELIGIBLE NON-SCIENCE AND ENGINEERING FIELDS

CATEGORIES & FIELDS	1993 NSF CODE	1990 CIP CODE
OTHER, AGRI-BUSINESS	602	01.0101-01.0102
"	"	01.0104-01.9999
ARCHITECTURE	610	ALL 04
BUSINESS MANAGEMENT	651-659	ALL 08, ALL 52
COMMUNICATIONS	661-663	ALL 09
COMPUTER PROGRAMMING	672	11.0201
DATA PROCESSING TECHN	675	11.0301
OTHER, CONSERVATION	682	03.0101
"	"	03.0201-03.0501
"	"	03.0506-03.9999
CRIMINAL JUSTICE	690	ALL 43
EDUCATION	701-703	ALL 13 EXCEPT 13.0802
"	705-713	"
ENGINEERING-RELATED TECHN	751-754	ALL 15
"	"	48.0101-48.0199
ENGLISH LANGUAGE	760	ALL 23
OTHER, FOREIGN LANGUAGE	772	16.0101
"	"	16.0103-16.9999
HEALTH PROFESSIONS	781-791	ALL 51
HOME ECONOMICS	800	ALL 19, ALL 20
LAW/PRELAW/LEGAL STUDIES	810	ALL 22
LIBERAL ARTS	820	ALL 24
LIBRARY SCIENCE	830	ALL 25
PARKS RECREATION	850	ALL 31
OTHER, PHILOSOPHY	862	ALL 38, ALL 39
PUBLIC ADMINISTRATION	901	44.0401
OTHER, PUBLIC AFFAIRS	903	44.0201,44.9999
SOCIAL WORK	910	44.0701
HISTORY, OTHER	926	45.0801-45.0803
"	"	45.0805-45.0899
VISUAL & PERFORMING ARTS	941-944	ALL 50
OTHER FIELDS	995	ALL 10, ALL 12
"	"	29.0101
"	"	30.1201
"	"	30.1301
"	"	30.1401
"	"	30.9999
"	"	ALL 32 THRU 37
"	"	ALL 41, ALL 46, ALL 47
"	"	48.0201-48.9999
"	"	ALL 49

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Table S-1. Number of 1991 science and engineering bachelor's degree recipients, by primary status, median salary, and field of degree: April 1993

Major field	Total recipients	Primary status				Median salary for full-time employed 2/
		Full-time students	Employed in science and engineering 1/	Employed in other occupation 1/	Not employed or full-time student	
All science and engineering fields	308,500	69,900	72,800	148,400	17,500	25,300
Major type						
Total science	247,900	61,600	34,900	137,200	14,200	22,100
Total engineering	60,600	8,300	38,000	11,200	3,200	33,800
Major field						
Computer and mathematical sciences, total	37,800	4,000	13,300	18,800	1,700	28,500
Computer science and information sciences	24,500	1,600	11,500	10,300	1,200	31,000
Mathematics and related sciences	13,200	2,400	1,800	8,400	600	23,400
Life and related sciences, total	47,600	17,800	7,700	19,000	3,100	21,000
Agricultural and food sciences	4,200	800	800	2,500	200	21,600
Biological sciences	40,000	16,600	5,900	15,000	2,600	20,800
Environmental life sciences including forestry sciences	3,400	400	1,000	1,500	400	21,300
Physical and related sciences, total	16,200	6,000	4,600	4,900	600	25,000
Chemistry, except biochemistry	7,300	2,900	2,400	1,700	200	27,000
Earth sciences, geology, and oceanography	3,800	900	1,200	1,400	200	23,000
Physics and astronomy	4,400	2,100	900	1,200	200	25,000
Other physical sciences	800	100	100	500	S	24,000
Social and related sciences, total	146,300	33,800	9,200	94,500	8,800	21,000
Economics	22,800	2,900	2,200	16,700	1,000	24,000
Political science and related sciences	32,800	10,300	1,300	19,200	1,900	21,600
Psychology	54,600	14,800	3,900	32,900	3,100	19,000
Sociology and anthropology	22,400	3,400	1,200	16,100	1,700	20,800
Other social sciences	13,700	2,400	600	9,600	1,100	23,000
Engineering, total	60,600	8,300	38,000	11,200	3,200	33,800
Aerospace and related engineering	3,500	800	1,400	1,000	300	29,000
Chemical engineering	3,300	600	2,300	300	100	40,000
Civil and architectural engineering	7,200	600	5,400	1,000	200	31,000
Electrical, electronic, computer and communications engineering	22,100	3,500	13,100	3,900	1,700	35,000
Industrial engineering	3,700	200	2,400	900	100	33,000
Mechanical engineering	12,900	1,500	8,800	2,200	400	35,000
Other engineering	7,900	1,000	4,600	1,900	400	33,000

1/ The definition of "employed in science and engineering" and "employed in other occupations" was revised substantially for the 1993 survey. Data are therefore not comparable to previous year's survey results.

2/ Salary for self-employed persons and for full-time students is not included in data presented in table.

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data relinbility. For salary data, the unweighted cell size is less than 20.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993.

Table S-2. Number of 1991 science and engineering bachelor's degree recipients, by primary status, median salary, sex, and field of degree: April 1993

Major field	Total recipients	Primary status				Median salary for full-time employed 2/
		Full-time student	Employed in science and engineering 1/	Employed in other occupation 1/	Not employed or full-time student	
All science and engineering fields	308,500	69,900	72,800	148,400	17,500	$25,300
Total science						
Male	119,300	31,000	19,400	63,400	5,500	25,000
Female	128,600	30,600	15,400	73,800	8,700	22,000
Computer and mathematical sciences						
Male	21,900	2,700	8,400	10,000	800	32,000
Female	15,900	1,300	4,900	8,800	900	28,000
Life and related sciences						
Male	24,100	9,200	4,200	9,500	1,200	23,500
Female	23,500	8,600	3,500	9,400	1,900	22,000
Physical and related sciences						
Male	11,200	4,400	2,900	3,500	300	26,000
Female	5,000	1,700	1,700	1,400	300	25,000
Social and related sciences						
Male	62,000	14,700	3,800	40,400	3,100	23,000
Female	84,200	19,100	5,400	54,200	5,600	21,000
Total engineering						
Male	51,600	7,300	31,500	9,900	2,800	35,000
Female	9,000	1,000	6,400	1,200	400	36,000
Aerospace and related engineering						
Male	3,000	600	1,100	1,000	200	30,000
Female	500	100	300	S	S	34,400
Chemical engineering						
Male	2,100	400	1,500	200	S	41,000
Female	1,200	300	800	S	S	42,000
Civil and architectural engineering						
Male	6,100	600	4,500	800	200	32,000
Female	1,100	S	900	100	S	32,500
Electrical, electronic, computer and communications engineering						
Male	19,600	3,300	11,200	3,500	1,500	35,000
Female	2,600	100	1,900	400	200	37,000
Industrial engineering						
Male	2,600	200	1,700	700	S	35,000
Female	1,100	S	700	200	S	33,000
Mechanical engineering						
Male	11,500	1,300	7,700	2,000	400	36,000
Female	1,500	200	1,100	200	S	38,000
Other engineering						
Male	6,800	900	3,900	1,700	400	32,000
Female	1,100	100	700	200	S	36,000

1/ The definitions of "employed in science and engineering" and "employed in other occupations" were revised substantially for the 1993 survey. Data are not comparable to previous years survey results.

2/ Salary for self-employed persons and for full-time students is not included in data presented in tables.

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. For salary data, the unweighted cell size is less than 20.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993.

Table S-3. Number of 1991 science and engineering bachelor's degree recipients, by primary status, median salary, race/ethnicity, and field of degree: April 1993

Major field	Total recipients	Primary status				Median salary for full-time employed 2/
		Full-time student	Employed in science and engineering 1/	Employed in other occupation 1/	Not employed or full-time student	
All science and engineering fields	308,500	69,900	72,800	148,400	17,500	$25,300
Total science						
White, non-Hispanic	201,900	48,700	27,900	114,000	11,300	23,400
Black, non-Hispanic	16,500	4,300	2,100	9,100	1,100	23,000
Hispanic	13,000	3,400	1,900	7,000	700	23,000
Asian or Pacific Islander	15,500	5,000	2,900	6,500	1,000	26,000
American Indian/Alaskan Native	1,000	100	100	600	100	24,000
Computer and mathematical sciences						
White, non-Hispanic	26,400	3,000	9,400	13,100	900	31,000
Black, non-Hispanic	4,100	400	1,200	2,100	400	23,000
Hispanic	2,500	100	1,100	1,100	200	32,500
Asian or Pacific Islander	4,400	400	1,500	2,400	100	30,000
American Indian/Alaskan Native	300	S	100	S	100	S
Life and related sciences						
White, non-Hispanic	38,300	13,200	6,400	16,200	2,500	22,500
Black, non-Hispanic	2,900	1,800	400	500	200	S
Hispanic	2,200	800	400	1,000	S	S
Asian or Pacific Islander	4,200	2,100	600	1,200	300	S
American Indian/Alaskan Native	S	S	S	S	S	S
Physical and related sciences						
White, non-Hispanic	13,400	5,000	4,000	3,900	400	26,000
Black, non-Hispanic	900	300	200	300	S	S
Hispanic	600	100	100	300	S	25,000
Asian or Pacific Islander	1,400	700	300	400	S	26,800
American Indian/Alaskan Native	S	S	S	S	S	S
Social and related sciences						
White, non-Hispanic	123,700	27,500	8,100	80,700	7,400	22,000
Black, non-Hispanic	8,700	1,800	300	6,100	500	23,000
Hispanic	7,800	2,400	300	4,600	400	21,200
Asian or Pacific Islander	5,400	1,900	500	2,500	500	23,500
American Indian/Alaskan Native	700	100	S	600	S	S
Total engineering						
White, non-Hispanic	46,000	5,600	29,700	8,600	2,000	35,000
Black, non-Hispanic	3,600	500	2,000	900	300	36,000
Hispanic	3,400	400	2,500	400	100	36,000
Asian or Pacific Islander	7,700	1,800	3,700	1,300	800	33,000
American Indian/Alaskan Native	S	S	S	S	S	S

1/ The definitions of "employed in science and engineering" and "employed in other occupations" were revised substantially for the 1993 survey. Data are not comparable to previous years survey results.

2/ Salary for self-employed persons and for full-time students is not included in data presented in tables.

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. For salary data, the unweighted cell size is less than 20.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993.

Table S-4. Number of 1992 science and engineering bachelor's degree recipients, by primary status, median salary, and field of degree: April 1993

Major field	Total recipients	Primary status				Median salary for full-time employed 2/
		Full-time students	Employed in science and engineering 1/	Employed in other occupation 1/	Not employed or full-time student	
All science and engineering fields	330,900	71,800	65,700	173,400	19,800	$23,000
Major type						
Total science	273,100	62,600	32,600	160,600	17,300	21,000
Total engineering	57,700	9,300	33,100	12,800	2,500	32,000
Major field						
Computer and mathematical sciences, total	39,800	4,900	11,900	20,700	2,300	26,500
Computer science and information sciences	25,700	1,400	10,600	12,300	1,500	30,000
Mathematics and related sciences	14,100	3,500	1,300	8,500	800	21,500
Life and related sciences, total	52,100	18,400	6,200	24,300	3,200	19,500
Agricultural and food sciences	4,900	1,000	800	2,800	300	21,000
Biological sciences	43,300	16,700	4,600	19,500	2,500	19,500
Environmental life sciences including forestry sciences	3,900	700	900	2,000	300	18,200
Physical and related sciences, total	17,500	7,200	4,900	4,800	600	25,000
Chemistry, except biochemistry	8,600	3,700	2,700	2,000	200	27,000
Earth sciences, geology, and oceanography	3,800	1,100	1,300	1,300	100	21,900
Physics and astronomy	4,700	2,200	900	1,300	300	25,000
Other physical sciences	500	100	S	300	S	S
Social and related sciences, total	163,700	32,100	9,500	110,800	11,300	20,000
Economics	23,700	4,000	1,400	17,100	1,200	23,500
Political science and related sciences	41,800	8,000	2,000	28,400	3,500	20,800
Psychology	61,100	13,600	5,300	37,400	4,700	18,000
Sociology and anthropology	24,900	4,600	S	18,700	1,600	20,400
Other social sciences	12,200	1,900	800	9,300	300	22,000
Engineering, total	57,700	9,300	33,100	12,800	2,500	32,000
Aerospace and related engineering	3,800	900	1,200	1,600	200	27,000
Chemical engineering	3,400	400	2,400	400	200	38,600
Civil and architectural engineering	8,400	1,200	5,400	1,300	400	30,000
Electrical, electronic, computer and communications engineering	19,700	3,200	11,700	3,800	1,100	34,000
Industrial engineering	4,000	300	2,100	1,400	100	32,000
Mechanical engineering	12,200	1,900	7,500	2,600	300	32,000
Other engineering	6,200	1,400	[illegible]	1,700	300	33,000

1/ The definition of "employed in science and engineering" and "employed in other occupations" was [illegible] substantially for the 1993 survey. Data are therefore not comparable to previous year's survey results.

2/ Salary for self-employed persons and for full-time students is not included in data presented in table.

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. For salary data the unweighted cell size is less than 20.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993.

Table S-5. Number of 1992 science and engineering bachelor's degree recipients, by primary status, median salary, sex, and field of degree: April 1993

Major field	Total recipients	Primary status: Full-time student	Primary status: Employed in science and engineering 1/	Primary status: Employed in other occupation 1/	Primary status: Not employed or full-time student	Median salary for full-time employed 2/
All science and engineering fields	330,900	71,800	65,700	173,400	19,800	$23,000
Total science						
Male	133,800	30,300	19,200	76,300	8,000	23,000
Female	139,400	32,200	13,400	84,300	9,300	20,000
Computer and mathematical sciences						
Male	23,700	2,800	7,600	12,000	1,200	29,000
Female	16,100	2,100	4,300	8,800	1,000	25,000
Life and related sciences						
Male	27,000	10,400	3,200	12,000	1,300	20,300
Female	25,100	8,000	3,100	12,300	1,800	19,200
Physical and related sciences						
Male	12,000	5,100	3,300	3,300	400	25,000
Female	5,500	2,100	1,700	1,500	200	25,000
Social and related sciences						
Male	71,100	12,000	5,100	49,000	5,000	21,600
Female	92,600	20,100	4,400	61,800	6,300	19,000
Total engineering						
Male	50,200	8,200	27,800	11,800	2,300	32,000
Female	7,600	1,100	5,300	1,000	200	32,800
Aerospace and related engineering						
Male	3,500	800	1,000	1,600	200	27,600
Female	300	S	200	S	S	S
Chemical engineering						
Male	2,200	300	1,500	300	100	38,000
Female	1,200	200	900	100	S	40,000
Civil and architectural engineering						
Male	7,100	1,100	4,300	1,200	400	30,000
Female	1,300	100	1,100	S	S	30,000
Electrical, electronic, computer and communications engineering						
Male	17,900	3,000	10,300	3,600	1,100	33,600
Female	1,800	200	1,400	200	S	S
Industrial engineering						
Male	3,000	200	1,400	1,200	100	32,000
Female	1,000	S	700	200	S	32,000
Mechanical engineering						
Male	11,200	1,700	6,900	2,400	200	32,000
Female	1,000	200	600	200	S	S
Other engineering						
Male	5,300	1,100	2,500	1,600	200	33,500
Female	900	300	400	100	100	32,000

1/ The definitions of "employed in science and engineering" and "employed in other occupations" were revised substantially for the 1993 survey. Data are not comparable to previous years survey results.

2/ Salary for self-employed persons and for full-time students is not included in data presented in tables.

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. For salary data, the unweighted cell size is less than 20.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993.

Table S-6. Number of 1992 science and engineering bachelor's degree recipients, by primary status, median salary, race/ethnicity, and field of degree: April 1993

Major field	Total recipients	Primary status				Median salary for full-time employed 2/
		Full-time student	Employed in science and engineering 1/	Employed in other occupation 1/	Not employed or full-time student	
All science and engineering fields	330,900	71,800	65,700	173,400	19,800	$22,600
Total science						
White, non-Hispanic	221,900	48,300	25,400	133,600	14,700	20,800
Black, non-Hispanic	21,300	4,600	3,100	12,800	800	20,000
Hispanic	11,100	3,500	1,600	5,400	700	21,700
Asian or Pacific Islander	18,100	6,100	2,500	8,300	1,100	24,000
American Indian/Alaskan Native	700	S	100	500	S	S
Computer and mathematical sciences						
White, non-Hispanic	29,400	3,900	7,900	16,000	1,600	26,400
Black, non-Hispanic	4,100	300	1,500	2,300	100	25,500
Hispanic	1,600	200	700	700	100	S
Asian or Pacific Islander	4,500	500	1,800	1,700	400	28,500
American Indian/Alaskan Native	100	S	100	S	S	S
Life and related sciences						
White, non-Hispanic	41,100	12,200	5,200	20,900	2,800	19,700
Black, non-Hispanic	3,300	1,600	300	1,200	200	S
Hispanic	2,300	1,500	400	400	S	S
Asian or Pacific Islander	5,200	3,100	300	1,600	200	S
American Indian/Alaskan Native	200	S	S	200	S	S
Physical and related sciences						
White, non-Hispanic	14,800	5,800	4,400	4,200	400	25,000
Black, non-Hispanic	800	300	300	200	S	S
Hispanic	700	300	100	200	S	S
Asian or Pacific Islander	1,200	800	S	200	S	S
American Indian/Alaskan Native	S	S	S	S	S	S
Social and related sciences						
White, non-Hispanic	136,600	26,400	7,900	92,400	9,900	20,000
Black, non-Hispanic	13,000	2,500	1,000	9,100	500	20,000
Hispanic	6,500	1,500	300	4,200	500	20,000
Asian or Pacific Islander	7,200	1,700	300	4,800	400	22,000
American Indian/Alaskan Native	300	S	S	300	S	S
Total engineering						
White, non-Hispanic	44,900	7,100	26,300	9,800	1,700	32,000
Black, non-Hispanic	2,600	300	1,500	800	S	32,000
Hispanic	2,600	300	1,900	300	S	32,000
Asian or Pacific Islander	7,300	1,600	3,300	1,800	700	34,000
American Indian/Alaskan Native	200	S	100	S	S	S

1/ The definitions of "employed in science and engineering" and "employed in other occupations" were revised substantially for the 1993 survey. Data are not comparable to previous years survey results.

2/ Salary for self-employed persons and for full-time students is not included in data presented in tables.

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. For salary data, the unweighted cell size is less than 20.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993.

Table S-7. Number of 1991 science and engineering master's degree recipients, by primary status, median salary, and field of degree: April 1993

Major field	Total recipients	Full-time students	Primary status			Median salary for full-time employed 2/
			Employed in science and engineering 1/	Employed in other occupation 1/	Not employed or full-time student	
All science and engineering fields	57,000	11,900	28,800	13,800	2,500	$39,000
Major type						
Total science	36,900	9,000	14,700	11,400	1,800	33,800
Total engineering	20,100	3,000	14,000	2,400	700	42,900
Major field						
Computer and mathematical sciences, total	13,000	2,000	6,300	4,200	400	40,000
Computer science and information sciences	8,700	900	4,700	2,700	300	42,000
Mathematics and related sciences	4,300	1,000	1,600	1,500	100	34,600
Life and related sciences, total	6,900	1,900	2,300	2,200	500	29,000
Agricultural and food sciences	1,100	200	500	300	S	30,000
Biological sciences	5,300	1,600	1,600	1,700	400	28,000
Environmental life sciences including forestry sciences	500	S	200	200	S	34,000
Physical and related sciences, total	5,200	1,800	2,700	500	100	34,000
Chemistry, except biochemistry	1,500	500	800	200	S	33,000
Earth sciences, geology, and oceanography	1,900	300	1,300	200	S	36,000
Physics and astronomy	1,600	900	500	100	S	35,000
Other physical sciences	100	S	S	S	S	S
Social and related sciences, total	11,800	3,300	3,300	4,400	700	28,000
Economics	1,700	400	500	600	200	31,200
Political science and related sciences	1,500	400	200	600	200	35,000
Psychology	5,100	1,500	1,800	1,500	200	26,400
Sociology and anthropology	1,700	600	400	600	S	25,000
Other social sciences	1,900	300	400	1,100	S	30,000
Engineering, total	20,100	3,000	14,000	2,400	700	42,900
Aerospace and related engineering	1,000	200	600	100	S	40,000
Chemical engineering	700	200	400	S	S	44,000
Civil and architectural engineering	2,600	300	2,000	100	100	38,800
Electrical, electronic, computer and communications engineering	8,100	900	5,700	1,100	300	44,000
Industrial engineering	1,200	200	800	200	S	42,500
Mechanical engineering	3,100	400	2,400	200	S	42,000
Other engineering	3,500	600	2,200	600	S	43,000

1/ The definition of "employed in science and engineering" and "employed in other occupations" was revised substantially for the 1993 survey. Data are not comparable to previous years survey results.

2/ Salary for self-employed persons and for full-time students is not included in data presented in tables.

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. For salary data, the unweighted cell size is less than 20.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993.

Table S-8. Number of 1991 science and engineering master's degree recipients, by primary status, median salary, sex, and field of degree: April 1993

Major field	Total recipients	Primary status				Median salary for full-time employed 2/
		Full-time student	Employed in science and engineering 1/	Employed in other occupation 1/	Not employed or full-time student	
All science and engineering fields	57,000	11,900	28,800	13,800	2,500	$39,000
Total science						
Male	21,600	5,300	9,000	6,500	700	35,000
Female	15,300	3,600	5,700	4,800	1,100	30,000
Computer and mathematical sciences						
Male	8,800	1,300	4,300	2,900	200	40,000
Female	4,200	600	2,000	1,300	200	37,600
Life and related sciences						
Male	3,500	1,000	1,300	1,100	200	29,000
Female	3,400	900	1,000	1,100	300	29,000
Physical and related sciences						
Male	3,800	1,300	2,000	400	S	35,000
Female	1,500	500	800	100	S	31,000
Social and related sciences						
Male	5,500	1,700	1,400	2,100	200	29,500
Female	6,300	1,600	1,900	2,300	500	26,400
Total engineering						
Male	17,200	2,500	12,000	2,200	400	44,000
Female	3,000	400	2,000	300	300	44,400
Aerospace and related engineering						
Male	900	200	500	100	S	41,000
Female	S	S	S	S	S	S
Chemical engineering						
Male	600	200	300	S	S	46,000
Female	100	S	S	S	S	S
Civil and architectural engineering						
Male	1,900	300	1,400	100	S	41,100
Female	600	S	500	S	S	41,400
Electrical, electronic, computer and communications engineering						
Male	7,100	700	5,200	1,000	200	45,000
Female	1,000	200	600	S	100	S
Industrial engineering						
Male	1,000	100	700	100	S	44,300
Female	300	S	200	S	S	44,000
Mechanical engineering						
Male	2,800	400	2,100	200	S	42,000
Female	300	S	300	S	S	S
Other engineering						
Male	2,900	500	1,800	500	S	44,000
Female	600	100	300	100	S	43,000

1/ The definitions of "employed in science and engineering" and "employed in other occupations" were revised substantially for the 1993 survey. Data are not comparable to previous years survey results.

2/ Salary for self-employed persons and for full-time students is not included in data presented in tables.

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. For salary data, the unweighted cell size is less than 20.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993.

Table S-9. Number of 1991 science and engineering master's degree recipients, by primary status, median salary, race/ethnicity, and field of degree: April 1993

Major field	Total recipients	Primary status				Median salary for full-time employed 2/
		Full-time student	Employed in science and engineering 1/	Employed in other occupation 1/	Not employed or full-time student	
All science and engineering fields	57,000	11,900	28,800	13,800	2,500	$39,000
Total science						
White, non-Hispanic	28,100	6,100	11,500	9,400	1,100	33,000
Black, non-Hispanic	1,800	300	600	700	300	35,000
Hispanic	1,300	500	400	300	100	30,000
Asian or Pacific Islander	5,500	2,000	2,200	900	300	36,000
American Indian/Alaskan Native	200	S	S	S	S	S
Computer and mathematical sciences						
White, non-Hispanic	9,100	1,200	4,300	3,300	300	40,000
Black, non-Hispanic	900	S	400	300	100	S
Hispanic	300	S	200	S	S	S
Asian or Pacific Islander	2,800	700	1,500	500	S	39,000
American Indian/Alaskan Native	S	S	S	S	S	S
Life and related sciences						
White, non-Hispanic	5,600	1,400	2,100	1,900	300	29,000
Black, non-Hispanic	200	S	S	S	S	S
Hispanic	300	100	S	S	S	S
Asian or Pacific Islander	800	200	200	200	100	S
American Indian/Alaskan Native	S	S	S	S	S	S
Physical and related sciences						
White, non-Hispanic	3,900	1,100	2,200	500	S	35,000
Black, non-Hispanic	100	S	S	S	S	S
Hispanic	200	100	S	S	S	S
Asian or Pacific Islander	1,000	500	400	S	S	31,000
American Indian/Alaskan Native	S	S	S	S	S	S
Social and related sciences						
White, non-Hispanic	9,500	2,400	2,900	3,700	500	28,000
Black, non-Hispanic	500	S	S	300	S	S
Hispanic	600	200	100	200	S	S
Asian or Pacific Islander	1,000	600	200	100	100	S
American Indian/Alaskan Native	100	S	S	S	S	S
Total engineering						
White, non-Hispanic	13,100	1,700	9,300	1,900	300	45,000
Black, non-Hispanic	700	100	500	100	S	52,000
Hispanic	700	S	600	S	S	46,000
Asian or Pacific Islander	5,600	1,100	3,600	400	400	41,000
American Indian/Alaskan Native	S	S	S	S	S	S

1/ The definitions of "employed in science and engineering" and "employed in other occupations" were revised substantially for the 1993 survey. Data are not comparable to previous years survey results.

2/ Salary for self-employed persons and for full-time students is not included in data presented in tables.

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. For salary data the unweighted cell size is less than 20.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993.

Table S-10. Number of 1992 science and engineering master's degree recipients, by primary status, median salary, and field of degree: April 1993

Major field	Total recipients	Full-time students	Primary status: Employed in science and engineering 1/	Primary status: Employed in other occupation 1/	Primary status: Not employed or full-time student	Median salary for full-time employed 2/
All science and engineering fields	58,600	14,800	26,400	14,300	3,200	$37,500
Major type						
Total science	37,700	10,800	12,600	12,100	2,300	33,800
Total engineering	20,900	4,000	13,700	2,200	900	41,600
Major field						
Computer and mathematical sciences, total	11,100	1,800	5,100	3,300	800	40,000
Computer science and information sciences	7,100	700	3,600	2,300	500	42,000
Mathematics and related sciences	3,900	1,100	1,500	1,000	300	35,000
Life and related sciences, total	6,300	1,900	2,200	1,900	300	29,500
Agricultural and food sciences	900	300	300	300	S	30,000
Biological sciences	4,800	1,600	1,600	1,500	200	28,000
Environmental life sciences including forestry sciences	500	S	400	100	S	33,700
Physical and related sciences, total	5,400	2,200	2,200	800	200	35,000
Chemistry, except biochemistry	1,500	500	700	200	S	34,000
Earth sciences, geology, and oceanography	S	S	S	S	S	39,000
Physics and astronomy	2,100	1,300	600	200	S	35,000
Other physical sciences	200	S	100	S	S	S
Social and related sciences, total	14,900	4,800	3,200	6,000	900	28,000
Economics	2,100	700	500	700	200	31,200
Political science and related sciences	3,200	700	500	1,800	100	34,700
Psychology	6,400	2,300	1,500	2,200	300	26,500
Sociology and anthropology	1,800	800	400	500	100	22,700
Other social sciences	1,400	300	200	900	100	S
Engineering, total	20,900	4,000	13,700	2,200	900	41,600
Aerospace and related engineering	1,000	300	500	100	S	41,000
Chemical engineering	900	300	500	S	S	42,000
Civil and architectural engineering	2,400	400	1,700	200	100	36,000
Electrical, electronic, computer and communications engineering	7,600	1,400	5,400	500	300	43,000
Industrial engineering	1,400	200	800	300	S	40,000
Mechanical engineering	3,300	700	2,200	200	200	41,000
Other engineering	4,400	800	2,600	800	200	42,000

1/ The definition of "employed in science and engineering" and "employed in other occupations" was revised substantially for the 1993 survey. Data are not comparable to previous years survey results.

2/ Salary for self-employed persons and for full-time students is not included in data presented in tables.

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. For salary data, the unweighted cell size is less than 20.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993.

Table S-11. Number of 1992 science and engineering master's degree recipients, by primary status, median salary, sex, and field of degree: April 1993

Major field	Total recipients	Primary status				Median salary for full-time employed 2/
		Full-time student	Employed in science and engineering 1/	Employed in other occupation 1/	Not employed or full-time student	
All science and engineering fields	58,600	14,800	26,400	14,300	3,200	$37,500
Total science						
Male	20,400	5,800	7,100	6,300	1,100	36,000
Female	17,400	5,000	5,500	5,700	1,100	30,000
Computer and mathematical sciences						
Male	7,400	1,300	3,500	2,200	400	40,000
Female	3,700	600	1,600	1,100	400	38,000
Life and related sciences						
Male	3,100	1,200	1,100	700	S	30,000
Female	3,200	700	1,100	1,200	200	28,900
Physical and related sciences						
Male	3,900	1,600	1,500	600	200	36,000
Female	1,600	600	700	300	S	34,000
Social and related sciences						
Male	6,000	1,700	1,100	2,800	500	31,200
Female	8,900	3,200	2,000	3,200	400	26,500
Total engineering						
Male	17,600	3,500	11,600	1,900	700	42,000
Female	3,300	500	2,200	300	300	40,000
Aerospace and related engineering						
Male	900	300	400	100	S	40,000
Female	S	S	S	S	S	S
Chemical engineering						
Male	800	200	500	S	S	42,000
Female	200	S	S	S	S	S
Civil and architectural engineering						
Male	1,900	300	1,400	100	S	36,000
Female	500	S	300	S	S	S
Electrical, electronic, computer and communications engineering						
Male	6,700	1,300	4,800	400	200	43,000
Female	900	S	600	100	S	S
Industrial engineering						
Male	1,000	100	600	300	S	40,000
Female	300	S	200	S	S	37,100
Mechanical engineering						
Male	3,000	700	2,000	200	200	40,000
Female	300	S	300	S	S	S
Other engineering						
Male	3,300	500	2,000	700	100	43,800
Female	1,100	200	600	100	S	39,000

1/ The definitions of "employed in science and engineering" and "employed in other occupations" were revised substantially for the 1993 survey. Data are not comparable to previous years survey results.

2/ Salary for self-employed persons and for full-time students is not included in data presented in tables.

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. For salary data, the unweighted cell size is less than 20.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993.

Table S-12. Number of 1992 science and engineering master's degree recipients, by primary status, median salary, race/ethnicity, and field of degree: April 1993

Major field	Total recipients	Primary status				Median salary for full-time employed 2/
		Full-time student	Employed in science and engineering 1/	Employed in other occupation 1/	Not employed or full-time student	
All science and engineering fields	58,600	14,800	26,400	14,300	3,200	$37,500
Total science						
White, non-Hispanic	27,800	7,400	9,400	9,300	1,600	33,800
Black, non-Hispanic	1,700	500	400	700	100	30,000
Hispanic	1,100	300	400	300	S	26,000
Asian or Pacific Islander	7,000	2,600	2,300	1,700	400	35,000
American Indian/Alaskan Native	100	S	S	S	S	S
Computer and mathematical sciences						
White, non-Hispanic	6,900	900	3,500	1,900	600	40,000
Black, non-Hispanic	400	S	S	200	S	S
Hispanic	200	100	S	S	S	S
Asian or Pacific Islander	3,600	700	1,400	1,200	200	36,000
American Indian/Alaskan Native	S	S	S	S	S	S
Life and related sciences						
White, non-Hispanic	4,800	1,400	1,600	1,600	200	29,000
Black, non-Hispanic	300	S	S	200	S	S
Hispanic	200	S	S	S	S	S
Asian or Pacific Islander	1,000	400	400	100	S	S
American Indian/Alaskan Native	S	S	S	S	S	S
Physical and related sciences						
White, non-Hispanic	3,800	1,300	1,700	700	200	37,000
Black, non-Hispanic	200	S	S	S	S	S
Hispanic	100	S	S	S	S	S
Asian or Pacific Islander	1,300	800	400	S	S	32,000
American Indian/Alaskan Native	S	S	S	S	S	S
Social and related sciences						
White, non-Hispanic	12,200	3,800	2,600	5,200	700	28,600
Black, non-Hispanic	800	300	200	300	100	S
Hispanic	600	200	200	300	S	S
Asian or Pacific Islander	1,200	700	200	300	S	S
American Indian/Alaskan Native	S	S	S	S	S	S
Total engineering						
White, non-Hispanic	13,700	2,000	9,600	1,600	400	43,000
Black, non-Hispanic	400	100	100	S	100	S
Hispanic	700	200	300	100	S	40,000
Asian or Pacific Islander	6,100	1,600	3,600	400	400	38,000
American Indian/Alaskan Native	S	S	S	S	S	S

1/ The definitions of "employed in science and engineering" and "employed in other occupations" were revised substantially for the 1993 survey. Data are not comparable to previous years survey results.

2/ Salary for self-employed persons and for full-time students is not included in data presented in tables.

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. For salary data, the unweighted cell size is less than 20.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993.

Table B-1. Number of 1991 science and engineering bachelor's degree recipients, by sex, race/ethnicity, and field of degree: April 1993

Major field	Total recipients	Sex		Race/ethnicity				
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native
All science and engineering fields	308,500	170,900	137,600	247,800	20,200	16,400	23,100	1,000
Major type								
Total science	247,900	119,300	128,600	201,900	16,500	13,000	15,500	1,000
Total engineering	60,600	51,600	9,000	46,000	3,600	3,400	7,700	S
Major field								
Computer and mathematical sciences, total	37,800	21,900	15,900	26,400	4,100	2,500	4,400	300
Computer science and information sciences	24,500	15,000	9,500	15,300	3,300	2,100	3,700	200
Mathematics and related sciences	13,200	6,900	6,400	11,200	800	400	800	S
Life and related sciences, total	47,600	24,100	23,500	38,300	2,900	2,200	4,200	S
Agricultural and food sciences	4,200	2,400	1,800	3,800	S	200	100	S
Biological sciences	40,000	19,800	20,300	31,400	2,800	1,800	4,100	S
Environmental life sciences including forestry sciences	3,400	1,900	1,400	3,200	S	S	S	S
Physical and related sciences, total	16,200	11,200	5,000	13,400	900	600	1,400	S
Chemistry, except biochemistry	7,300	4,400	2,900	5,500	600	400	900	S
Earth sciences, geology, and oceanography	3,800	2,600	1,200	3,500	S	S	100	S
Physics and astronomy	4,400	3,700	700	3,700	200	100	400	S
Other physical sciences	800	500	200	600	S	S	S	S
Social and related sciences, total	146,300	62,000	84,200	123,700	8,700	7,800	5,400	700
Economics	22,800	15,000	7,800	19,200	1,300	800	1,400	100
Political science and related sciences	32,800	18,900	13,800	27,900	1,800	2,200	900	S
Psychology	54,600	16,400	38,200	46,000	3,000	2,900	2,400	300
Sociology and anthropology	22,400	6,000	16,400	18,500	1,800	1,100	700	300
Other social sciences	13,700	5,700	8,000	12,100	800	800	S	S
Engineering, total	60,600	51,600	9,000	46,000	3,600	3,400	7,700	S
Aerospace and related engineering	3,500	3,000	500	3,100	100	100	200	S
Chemical engineering	3,300	2,100	1,200	2,700	300	200	200	S
Civil and architectural engineering	7,200	6,100	1,100	5,900	200	400	600	S
Electrical, electronic, computer and communications engineering	22,100	19,600	2,600	15,000	1,300	1,300	4,500	S
Industrial engineering	3,700	2,600	1,100	2,900	300	200	300	S
Mechanical engineering	12,800	11,500	1,500	10,700	500	600	1,100	S
Other engineering	7,900	6,800	1,100	5,700	1,000	500	700	S

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-2. Number of 1991 science and engineering bachelor's degree recipients, by race/ethnicity, by sex, and field of degree: April 1993

Major field	Race/ethnicity									
	White, non-Hispanic		Black, non-Hispanic		Hispanic		Asian or Pacific Islander		American Indian/ Alaskan Native	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
All science and engineering fields	139,900	107,900	8,500	11,700	8,200	8,200	13,700	9,400	600	400
Major type										
Total science	100,200	101,700	6,000	10,500	5,500	7,600	7,100	8,400	600	400
Total engineering	39,700	6,200	2,500	1,200	2,800	600	6,600	1,000	S	S
Major field										
Computer and mathematical sciences, total	16,100	10,400	1,800	2,400	1,500	900	2,400	2,100	200	100
Computer science and information sciences	10,300	5,000	1,400	1,900	1,300	800	2,000	1,700	100	100
Mathematics and related sciences	5,800	5,400	400	400	300	100	400	400	S	S
Life and related sciences, total	20,100	18,300	1,000	1,800	800	1,400	2,200	2,000	S	S
Agricultural and food sciences	2,200	1,600	S	S	200	S	S	S	S	S
Biological sciences	16,000	15,400	1,000	1,800	600	1,300	2,200	1,900	S	S
Environmental life sciences including forestry sciences	1,900	1,300	S	S	S	S	S	S	S	S
Physical and related sciences, total	9,400	4,000	600	300	500	200	800	600	S	S
Chemistry, except biochemistry	3,400	2,100	300	200	200	100	400	400	S	S
Earth sciences, geology, and oceanography	2,400	1,100	S	S	S	S	S	S	S	S
Physics and astronomy	3,100	600	200	S	S	S	300	S	S	S
Other physical sciences	400	200	S	S	S	S	S	S	S	S
Social and related sciences, total	54,700	69,100	2,600	6,100	2,700	5,100	1,700	3,700	400	300
Economics	13,200	6,000	600	700	500	300	600	800	100	S
Political science and related sciences	16,200	11,700	1,000	800	1,200	1,000	500	400	S	S
Psychology	14,400	31,600	500	2,500	600	2,300	600	1,800	200	200
Sociology and anthropology	5,400	13,100	400	1,300	S	1,100	S	700	100	100
Other social sciences	5,400	6,700	S	800	300	500	S	S	S	S
Engineering, total	39,700	6,200	2,500	1,200	2,800	600	6,600	1,000	S	S
Aerospace and related engineering	2,600	400	S	S	S	S	200	S	S	S
Chemical engineering	1,800	800	S	200	100	S	S	100	S	S
Civil and architectural engineering	5,200	800	S	S	300	S	500	200	S	S
Electrical, electronic, computer and communications engineering	13,500	1,500	800	400	1,200	S	4,000	500	S	S
Industrial engineering	2,100	800	200	100	100	100	200	S	S	S
Mechanical engineering	9,600	1,100	300	100	500	100	1,000	200	S	S
Other engineering	4,900	800	800	200	400	S	700	S	S	S

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-3. Number of 1991 science and engineering bachelor's degree recipients, by age and field of degree: April 1993

Major field	Total recipients	Age				
		Less than 25	25-29	30-34	35-39	40 or more
All science and engineering fields	308,500	172,000	94,700	20,100	10,400	11,300
Major type						
Total science	247,900	144,600	70,300	14,400	8,000	10,600
Total engineering	60,600	27,300	24,400	5,800	2,400	700
Major field						
Computer and mathematical sciences, total	37,800	17,600	12,400	4,000	1,900	1,900
Computer science and information sciences	24,500	9,000	9,300	3,300	1,500	1,400
Mathematics and related sciences	13,200	8,600	3,000	700	400	500
Life and related sciences, total	47,600	29,800	13,400	2,500	900	1,000
Agricultural and food sciences	4,200	2,400	1,200	500	100	S
Biological sciences	40,000	25,500	11,300	1,800	600	900
Environmental life sciences including forestry sciences	3,400	1,900	900	300	200	S
Physical and related sciences, total	16,200	9,500	4,800	1,300	400	300
Chemistry, except biochemistry	7,300	4,700	1,600	700	100	S
Earth sciences, geology, and oceanography	3,810	1,680	1,500	400	100	100
Physics and astronomy	4,410	2,840	1,270	200	S	S
Other physical sciences	800	300	400	S	S	S
Social and related sciences, total	146,300	87,700	39,800	6,500	4,800	7,400
Economics	22,800	14,500	6,000	1,500	300	400
Political science and related sciences	32,800	23,200	7,500	700	1,000	500
Psychology	54,600	32,300	15,000	2,600	1,800	2,900
Sociology and anthropology	22,400	13,100	6,300	700	300	1,900
Other social sciences	13,700	4,600	5,000	1,000	1,400	1,700
Engineering, total	60,600	27,300	24,400	5,800	2,400	700
Aerospace and related engineering	3,500	1,900	1,400	100	S	S
Chemical engineering	3,300	1,900	1,300	100	S	S
Civil and architectural engineering	7,200	2,600	3,500	800	200	S
Electrical, electronic, computer and communications engineering	22,100	8,700	9,100	3,000	1,000	200
Industrial engineering	3,700	1,500	1,900	200	S	100
Mechanical engineering	12,900	6,400	4,900	1,000	400	200
Other engineering	7,900	4,400	2,200	600	600	S

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-4. Number of 1991 science and engineering bachelor's degree recipients residing in the United States who are U.S. citizens, foreign born, and number who attended a foreign high school, by field of degree: April 1993

Major field	Total recipients	U.S. citizens	Foreign born	Attended foreign high school
All science and engineering fields	308,500	294,900	36,300	12,200
Major type				
Total science	247,900	338,900	24,900	7,500
Total engineering	60,600	55,900	11,400	4,800
Major field				
Computer and mathematical sciences, total	37,800	34,600	7,100	3,800
Computer science and information sciences	24,500	22,000	5,700	3,200
Mathematics and related sciences	13,200	12,600	1,400	700
Life and related sciences, total	47,600	45,400	5,900	1,800
Agricultural and food sciences	4,200	4,200	100	200
Biological sciences	40,000	37,800	5,700	1,600
Environmental life sciences including forestry sciences	3,400	3,400	S	S
Physical and related sciences, total	16,200	15,700	1,600	500
Chemistry, except biochemistry	7,300	7,000	900	300
Earth sciences, geology, and oceanography	3,800	3,800	100	S
Physics and astronomy	4,400	4,200	500	200
Other physical sciences	800	800	S	S
Social and related sciences, total	146,300	143,300	10,300	1,300
Economics	22,800	21,900	2,200	400
Political science and related sciences	32,800	32,300	2,100	400
Psychology	54,600	53,400	4,100	400
Sociology and anthropology	22,400	22,100	1,300	S
Other social sciences	13,700	13,600	700	200
Engineering, total	60,600	55,900	11,400	4,800
Aerospace and related engineering	3,500	3,400	500	200
Chemical engineering	3,300	3,300	300	100
Civil and architectural engineering	7,200	6,800	1,000	500
Electrical, electronic, computer and communications engineering	22,100	19,500	6,300	2,700
Industrial engineering	3,700	3,500	300	200
Mechanical engineering	12,900	12,300	1,800	600
Other engineering	7,900	7,200	1,300	500

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.
NOTE: Details may not add to totals because of rounding.
SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-5. Number of 1991 science and engineering bachelor's degree recipients residing in the United States who are native-born or naturalized U.S. citizens, and number who are permanent or temporary residents, by field of degree: April 1993

Major field	Total recipients	U.S. citizen		Non-U.S. citizen	
		Native born	Naturalized	Permanent resident	Temporary resident/ other
All science and engineering fields	308,500	275,400	19,400	8,900	4,700
Major type					
Total science	247,900	225,400	13,500	6,400	2,600
Total engineering	60,600	50,000	5,900	2,500	2,200
Major field					
Computer and mathematical sciences, total	37,800	31,200	3,300	1,900	1,300
Computer science and information sciences	24,500	19,300	2,700	1,600	1,000
Mathematics and related sciences	13,200	11,900	700	400	300
Life and related sciences, total	47,600	42,000	3,400	1,600	600
Agricultural and food sciences	4,200	4,100	S	S	S
Biological sciences	40,000	34,500	3,300	1,600	600
Environmental life sciences including forestry sciences	3,400	3,400	S	S	S
Physical and related sciences, total	16,200	14,800	1,000	300	200
Chemistry, except biochemistry	7,300	6,400	600	200	S
Earth sciences, geology, and oceanography	3,800	3,700	S	S	S
Physics and astronomy	4,400	4,000	200	100	100
Other physical sciences	800	700	S	S	S
Social and related sciences, total	146,300	137,400	5,800	2,600	400
Economics	22,800	20,800	1,100	800	100
Political science and related sciences	32,800	31,000	1,300	300	200
Psychology	54,600	51,200	2,200	1,100	S
Sociology and anthropology	22,400	21,400	700	200	100
Other social sciences	13,700	13,100	500	200	S
Engineering, total	60,600	50,000	5,900	2,500	2,200
Aerospace and related engineering	3,500	3,100	300	S	S
Chemical engineering	3,300	3,100	200	S	S
Civil and architectural engineering	7,200	6,300	500	100	200
Electrical, electronic, computer and communications engineering	22,100	16,200	3,400	1,400	1,200
Industrial engineering	3,700	3,400	200	100	S
Mechanical engineering	12,900	11,300	1,000	400	200
Other engineering	7,900	6,700	500	400	300

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-6. Number of 1991 science and engineering bachelor's degree recipients who received financial support from various sources for 1991 bachelor's degree, by field of degree: April 1993

Major field	Total recipients	Sources of support							
		Earnings from employment	Gifts from parents/ relatives	Scholarships, grants, fellowships	Loans from college, bank, government	Assistantships, work study	Employee assistance	Loans from parents or relatives	Other sources
All science and engineering fields	308,500	223,100	223,400	157,600	137,600	75,400	23,300	27,800	5,700
Major type									
Total science	247,900	176,700	181,500	122,800	110,400	61,500	15,500	19,800	4,500
Total engineering	60,600	46,300	41,900	34,800	27,200	13,900	7,700	7,900	1,100
Major field									
Computer and mathematical sciences, total	37,800	27,200	24,100	20,900	19,500	10,100	4,000	3,400	600
Computer science and information sciences	24,500	18,200	14,600	12,900	13,000	6,200	3,000	2,200	500
Mathematics and related sciences	13,200	9,000	9,500	8,000	6,600	3,800	1,000	1,200	100
Life and related sciences, total	47,600	35,600	35,400	27,600	21,500	12,900	2,100	4,400	600
Agricultural and food sciences	4,200	3,500	2,800	2,600	1,900	1,300	300	300	200
Biological sciences	40,000	29,400	30,300	23,200	18,100	10,700	1,600	3,900	200
Environmental life sciences including forestry sciences	3,400	2,700	2,300	1,800	1,500	1,000	200	200	200
Physical and related sciences, total	16,200	11,800	12,000	10,500	7,900	6,100	1,300	1,200	400
Chemistry, except biochemistry	7,300	5,200	5,600	4,800	3,400	2,500	800	400	200
Earth sciences, geology, and oceanography	3,800	2,800	2,600	2,300	2,100	1,400	200	300	S
Physics and astronomy	4,400	3,200	3,400	3,000	2,100	1,900	300	500	100
Other physical sciences	800	500	500	500	300	300	S	S	S
Social and related sciences, total	146,300	102,000	110,000	63,700	61,400	32,400	8,100	10,900	3,000
Economics	22,800	17,200	18,100	10,600	10,500	5,200	1,600	2,300	300
Political science and related sciences	32,800	24,000	26,300	14,800	14,000	7,700	1,300	3,500	1,100
Psychology	54,600	35,400	40,000	22,100	21,300	10,600	2,600	3,100	1,100
Sociology and anthropology	22,400	15,000	16,800	10,400	9,300	5,800	1,200	1,300	400
Other social sciences	13,700	10,400	8,800	5,800	6,300	3,000	1,400	600	S
Engineering, total	60,600	46,300	41,900	34,800	27,200	13,900	7,700	7,900	1,100
Aerospace and related engineering	3,500	2,700	2,500	2,100	1,600	800	600	500	S
Chemical engineering	3,300	2,700	2,400	2,500	1,600	1,100	100	500	S
Civil and architectural engineering	7,200	5,700	4,800	4,100	3,500	1,400	400	800	200
Electrical, electronic, computer and communications engineering	22,100	16,800	14,700	11,900	10,900	5,000	3,400	3,100	300
Industrial engineering	3,700	2,700	2,900	1,800	1,600	800	300	200	S
Mechanical engineering	12,900	9,900	8,600	7,600	4,900	2,700	1,700	2,200	300
Other engineering	7,900	5,900	5,900	4,800	3,200	2,100	1,200	700	200

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Respondents may have multiple sources of support. Therefore, column entries will not add to "Total recipents."

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-7. Number of 1991 science and engineering bachelor's degree recipients who have taken additional courses since most recent degree and enrollment status on April 15, 1993, by field of degree: April 1993

Major field	Total recipients	Have taken additional courses since most recent degree 1/	April 15, 1993 status: Full-time student	April 15, 1993 status: Part-time student	April 15, 1993 status: Not student
All science and engineering fields	308,500	129,000	69,900	28,800	209,900
Major type					
Total science	247,900	108,600	61,600	22,900	163,400
Total engineering	60,600	20,500	8,300	5,900	46,500
Major field					
Computer and mathematical sciences, total	37,800	12,100	4,000	3,900	29,900
Computer science and information sciences	24,500	5,700	1,600	2,300	20,700
Mathematics and related sciences	13,200	6,400	2,400	1,600	9,200
Life and related sciences, total	47,600	27,400	17,800	4,000	25,700
Agricultural and food sciences	4,200	1,200	800	200	3,300
Biological sciences	40,000	25,100	16,600	3,700	19,700
Environmental life sciences including forestry sciences	3,400	1,100	400	200	2,700
Physical and related sciences, total	16,200	9,000	6,000	1,200	9,000
Chemistry, except biochemistry	7,300	4,000	2,900	300	4,000
Earth sciences, geology, and oceanography	3,800	1,800	900	300	2,600
Physics and astronomy	4,400	2,700	2,100	500	1,800
Other physical sciences	800	400	100	100	500
Social and related sciences, total	146,300	60,100	33,800	13,700	98,800
Economics	22,800	7,200	2,900	1,700	18,200
Political science and related sciences	32,800	16,500	10,300	3,300	19,100
Psychology	54,600	22,200	14,800	5,800	34,100
Sociology and anthropology	22,400	9,500	3,400	2,300	16,600
Other social sciences	13,700	4,800	2,400	500	10,900
Engineering, total	60,600	20,500	8,300	5,900	46,500
Aerospace and related engineering	3,500	1,400	800	300	2,400
Chemical engineering	3,300	1,200	600	300	2,400
Civil and architectural engineering	7,200	1,900	600	600	5,900
Electrical, electronic, computer and communications engineering	22,100	9,000	3,500	2,500	16,100
Industrial engineering	3,700	1,200	200	500	3,000
Mechanical engineering	12,900	3,300	1,500	1,000	10,400
Other engineering	7,900	2,400	1,000	700	6,200

1/ Excludes those receiving a degree between April 15 and date of interview (May - November 1993)

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-8. Number of 1991 science and engineering bachelor's degree recipients who have not taken courses since most recent degree, and likelihood they will take additional courses, by field of degree: April 1993

Major field	Total number not taking courses since most recent degree 1/	Likelihood will take classes		
		Very likely	Somewhat likely	Very unlikely
All science and engineering fields	158,800	111,700	36,100	10,700
Major type				
Total science	122,100	89,000	25,500	7,600
Total engineering	36,400	22,700	10,600	3,100
Major field				
Computer and mathematical sciences, total	24,200	17,400	5,200	1,600
Computer science and information sciences	18,200	13,300	3,600	1,300
Mathematics and related sciences	5,900	4,000	1,600	300
Life and related sciences, total	17,900	12,800	3,800	1,300
Agricultural and food sciences	2,800	1,300	900	600
Biological sciences	13,000	10,200	2,300	500
Environmental life sciences including forestry sciences	2,000	1,300	600	100
Physical and related sciences, total	6,100	4,400	1,300	400
Chemistry, except biochemistry	2,800	1,900	700	200
Earth sciences, geology, and oceanography	1,800	1,200	400	100
Physics and astronomy	1,300	1,100	200	S
Other physical sciences	300	200	S	S
Social and related sciences, total	73,900	54,400	15,200	4,300
Economics	14,900	10,900	3,300	600
Political science and related sciences	13,700	10,500	2,900	300
Psychology	24,500	19,200	4,400	1,000
Sociology and anthropology	12,200	7,800	3,100	1,300
Other social sciences	8,700	6,100	1,500	1,100
Engineering, total	36,400	22,700	10,600	3,100
Aerospace and related engineering	1,900	1,000	800	100
Chemical engineering	2,000	1,400	500	100
Civil and architectural engineering	4,900	2,600	1,800	500
Electrical, electronic, computer and communications engineering	11,900	7,700	3,300	800
Industrial engineering	2,300	1,600	700	S
Mechanical engineering	8,600	5,300	2,400	900
Other engineering	5,000	3,200	1,200	600

1/ Excludes those receiving a degree between April 15 and date of interview (May-November 1993)

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-9. Number of 1991 science and engineering bachelor's degree recipients who have taken courses since most recent degree, and type of degree sought, by field of degree: April 1993

Major field	Total recipients	Have taken additional courses since most recent degree 1/	Types of degree sought				
			No specific degree	Ph.D. degree	Prof degree	MA degree	Other or BA degree
All science and engineering fields	308,500	129,000	30,400	12,200	22,600	53,600	10,400
Major type							
Total science	247,900	108,600	24,500	11,300	21,800	41,000	9,800
Total engineering	60,600	20,500	5,800	800	700	12,500	500
Major field							
Computer and mathematical sciences, total	37,800	12,100	3,600	900	400	5,800	1,300
Computer science and information sciences	24,500	5,700	2,000	S	100	2,900	700
Mathematics and related sciences	13,200	6,400	1,700	900	300	2,900	600
Life and related sciences, total	47,600	27,400	5,700	4,000	9,300	6,300	2,000
Agricultural and food sciences	4,200	1,200	200	200	200	600	S
Biological sciences	40,000	25,100	4,900	3,800	9,100	5,400	1,900
Environmental life sciences including forestry sciences	3,400	1,100	500	S	S	300	S
Physical and related sciences, total	16,200	9,000	1,600	2,700	1,300	3,000	300
Chemistry, except biochemistry	7,300	4,000	600	1,400	1,000	900	100
Earth sciences, geology, and oceanography	3,800	1,800	500	100	S	1,000	100
Physics and astronomy	4,400	2,700	400	1,200	100	1,000	S
Other physical sciences	800	400	100	S	S	200	S
Social and related sciences, total	146,300	60,100	13,600	3,600	10,900	25,900	6,200
Economics	22,800	7,200	2,700	100	1,900	1,900	500
Political science and related sciences	32,800	16,500	2,600	600	5,700	5,800	1,800
Psychology	54,600	22,200	4,200	2,600	1,600	11,800	2,000
Sociology and anthropology	22,400	9,500	2,800	300	1,100	3,800	1,400
Other social sciences	13,700	4,800	1,300	S	500	2,500	500
Engineering, total	60,600	20,500	5,800	800	700	12,500	500
Aerospace and related engineering	3,500	1,400	300	200	S	900	S
Chemical engineering	3,300	1,200	200	200	200	600	S
Civil and architectural engineering	7,200	1,900	500	S	S	1,300	S
Electrical, electronic, computer and communications engineering	22,100	9,000	2,500	100	S	6,100	300
Industrial engineering	3,700	1,200	600	S	S	500	S
Mechanical engineering	12,900	3,300	800	200	S	2,300	S
Other engineering	7,900	2,400	1,000	100	300	800	100

1/	Excludes those receiving a degree between April 15 and the date of interview (May-November 1993)
KEY:	S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.
NOTE:	Details may not add to totals because of rounding.
SOURCE:	National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-10. Number of 1991 science and engineering bachelor's degree recipients who are employed, employed full time, employed part time, and number who have a second job, by field of degree: April 1993

Major field	Total recipients	Employed	Employed full time	Employed part time	Having a second job
All science and engineering fields	308,500	260,700	214,800	45,900	35,600
Major type					
Total science	247,900	205,700	165,800	39,900	31,800
Total engineering	60,600	55,000	49,000	6,000	3,800
Major field					
Computer and mathematical sciences, total	37,800	34,700	31,200	3,500	4,400
Computer science and information sciences	24,500	23,000	21,600	1,400	2,300
Mathematics and related sciences	13,200	11,700	9,500	2,100	2,100
Life and related sciences, total	47,600	33,400	27,100	6,300	5,600
Agricultural and food sciences	4,200	3,800	3,100	600	700
Biological sciences	40,000	26,800	21,400	5,300	4,500
Environmental life sciences including forestry sciences	3,400	2,800	2,500	300	400
Physical and related sciences, total	16,200	13,700	10,200	3,500	1,200
Chemistry, except biochemistry	7,300	5,800	4,800	1,000	400
Earth sciences, geology, and oceanography	3,800	3,300	2,500	800	300
Physics and astronomy	4,400	3,800	2,200	1,600	400
Other physical sciences	800	700	600	100	S
Social and related sciences, total	146,300	124,000	97,400	26,600	20,500
Economics	22,800	20,100	17,900	2,200	2,000
Political science and related sciences	32,800	25,300	18,900	6,300	3,800
Psychology	54,600	46,700	35,000	11,700	9,400
Sociology and anthropology	22,400	19,500	15,900	3,600	3,700
Other social sciences	13,700	12,400	9,700	2,700	1,600
Engineering, total	60,600	55,000	49,000	6,000	3,800
Aerospace and related engineering	3,500	3,100	2,500	600	600
Chemical engineering	3,300	2,900	2,700	200	100
Civil and architectural engineering	7,200	6,800	6,200	600	500
Electrical, electronic, computer and communications engineering	22,100	19,600	17,200	2,400	1,500
Industrial engineering	3,700	3,500	3,300	200	S
Mechanical engineering	12,900	12,000	11,000	1,100	900
Other engineering	7,900	7,100	6,200	900	200

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-11. Number of 1991 science and engineering bachelor's degree recipients who are employed, unemployed, and not in the labor force, by field of degree: April 1993

Major field	Total recipients	Employed	Unemployed 1/	Not in labor force
All science and engineering fields	308,500	260,700	15,900	31,900
Major type				
Total science	247,900	205,700	12,600	29,700
Total engineering	60,600	55,000	3,400	2,200
Major field				
Computer and mathematical sciences, total	37,800	34,700	1,700	1,500
Computer science and information sciences	24,500	23,000	1,200	400
Mathematics and related sciences	13,200	11,700	500	1,100
Life and related sciences, total	47,600	33,400	1,900	12,300
Agricultural and food sciences	4,200	3,800	S	400
Biological sciences	40,000	26,800	1,800	11,500
Environmental life sciences including forestry sciences	3,400	2,800	100	400
Physical and related sciences, total	16,200	13,700	500	2,100
Chemistry, except biochemistry	7,300	5,800	100	1,300
Earth sciences, geology, and oceanography	3,800	3,300	200	300
Physics and astronomy	4,400	3,800	200	400
Other physical sciences	800	700	S	S
Social and related sciences, total	146,300	124,000	8,500	13,800
Economics	22,800	20,100	800	1,800
Political science and related sciences	32,800	25,300	3,000	4,400
Psychology	54,600	46,700	2,700	5,200
Sociology and anthropology	22,400	19,500	900	2,000
Other social sciences	13,700	12,400	1,000	300
Engineering, total	60,600	55,000	3,400	2,200
Aerospace and related engineering	3,500	3,100	300	100
Chemical engineering	3,300	2,900	200	200
Civil and architectural engineering	7,200	6,800	200	200
Electrical, electronic, computer and communications engineering	22,100	19,600	1,700	900
Industrial engineering	3,700	3,500	S	100
Mechanical engineering	12,900	12,000	500	400
Other engineering	7,900	7,100	400	300

1/ The unemployed are those who were not working on April 15 and who were seeking work or who were on layoff from a job.

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-12. Number of 1991 science and engineering bachelor's degree recipients who are not full-time students and number of non-full-time students who are not in the labor force, in the labor force, employed, and unemployed, by field of degree: April 1993

Major field	Not full-time students				
				In labor force	
	Total number	Not in labor force	In labor force	Employed	Unemployed 1/
All science and engineering fields	238,700	7,700	230,900	221,200	9,700
Major type					
Total science	186,300	7,300	179,000	172,000	7,000
Total engineering	52,400	500	51,900	49,100	2,700
Major field					
Computer and mathematical sciences, total	33,800	400	33,400	32,100	1,300
Computer science and information sciences	23,000	S	23,000	21,800	1,200
Mathematics and related sciences	10,800	400	10,400	10,200	100
Life and related sciences, total	29,800	1,900	27,900	26,700	1,200
Agricultural and food sciences	3,500	100	3,400	3,300	S
Biological sciences	23,400	1,500	21,900	20,800	1,100
Environmental life sciences including forestry sciences	2,900	300	2,600	2,600	S
Physical and related sciences, total	10,200	300	9,800	9,600	300
Chemistry, except biochemistry	4,400	200	4,200	4,200	S
Earth sciences, geology, and oceanography	2,900	100	2,800	2,600	100
Physics and astronomy	2,300	S	2,200	2,100	S
Other physical sciences	700	S	700	600	S
Social and related sciences, total	112,500	4,600	107,900	103,700	4,200
Economics	19,900	500	19,300	18,900	400
Political science and related sciences	22,500	1,000	21,500	20,500	1,000
Psychology	39,900	1,600	38,200	36,800	1,400
Sociology and anthropology	19,000	1,100	17,800	17,300	500
Other social sciences	11,400	300	11,000	10,200	800
Engineering, total	52,400	500	51,900	49,100	2,700
Aerospace and related engineering	2,700	S	2,700	2,400	200
Chemical engineering	2,700	S	2,700	2,600	S
Civil and architectural engineering	6,500	S	6,500	6,300	100
Electrical, electronic, computer and communications engineering	18,700	200	18,400	16,900	1,500
Industrial engineering	3,500	S	3,400	3,400	S
Mechanical engineering	11,400	S	11,400	11,000	400
Other engineering	6,900	S	6,900	6,500	400

1/ The unemployed are those who were not working on April 15 and who were seeking work or who were on layoff from a job.

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-13. Number of 1991 science and engineering bachelor's degree recipients who are not working and reasons for not working, by field of degree: April 1993

Major field	Total recip-ients	Total not working	Reasons for not working					
			Student	Suitable job not available	Family respon-sibilities	On layoff	Not need/ want to work	Other
All science and engineering fields	308,500	47,800	30,400	7,700	4,000	2,200	2,200	4,200
Major type								
Total science	247,900	42,200	27,800	6,100	3,800	1,200	1,900	3,700
Total engineering	60,600	5,600	2,600	1,600	100	1,000	300	500
Major field								
Computer and mathematical sciences, total	37,800	3,100	1,200	1,100	300	200	300	400
Computer science and information sciences	24,500	1,600	400	900	S	200	S	200
Mathematics and related sciences	13,200	1,600	800	200	300	S	300	200
Life and related sciences, total	47,600	14,300	11,500	1,400	1,000	S	300	800
Agricultural and food sciences	4,200	500	300	S	S	S	S	S
Biological sciences	40,000	13,200	11,000	1,200	800	S	200	600
Environmental life sciences including forestry sciences	3,400	500	200	100	100	S	100	S
Physical and related sciences, total	16,200	2,600	2,100	300	200	100	S	200
Chemistry, except biochemistry	7,300	1,400	1,200	S	S	S	S	S
Earth sciences, geology, and oceanography	3,800	500	300	100	S	S	S	S
Physics and astronomy	4,400	600	500	100	S	S	S	S
Other physical sciences	800	S	S	S	S	S	S	S
Social and related sciences, total	146,300	22,300	13,100	3,400	2,400	900	1,200	2,400
Economics	22,800	2,700	1,800	100	200	200	100	400
Political science and related sciences	32,800	7,500	5,400	1,300	600	200	300	500
Psychology	54,600	7,900	4,500	1,000	800	300	500	800
Sociology and anthropology	22,400	2,900	1,200	500	600	S	100	300
Other social sciences	13,700	1,300	200	500	200	200	200	300
Engineering, total	60,600	5,600	2,600	1,600	100	1,000	300	500
Aerospace and related engineering	3,500	400	200	100	S	S	S	S
Chemical engineering	3,300	400	300	S	S	S	S	S
Civil and architectural engineering	7,200	400	200	100	S	S	S	S
Electrical, electronic, computer and communications engineering	22,100	2,600	900	1,000	S	600	200	200
Industrial engineering	3,700	200	100	S	S	S	S	S
Mechanical engineering	12,900	900	500	200	S	100	S	100
Other engineering	7,900	700	500	200	S	S	S	S

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Respondents may indicate more than one reason for not working. Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-14. Number of employed 1991 science and engineering bachelor's degree recipients, by occupation and field of degree: April 1993

Major field	Total employed	Occupation					
		Computer and mathematical scientists	Life and related scientists	Physical scientists	Social and related scientists	Engineers	Other fields 1/
All science and engineering fields	260,700	20,700	9,400	9,700	10,500	41,500	169,000
Major type							
Total science	205,700	17,100	9,300	9,200	10,400	3,000	156,600
Total engineering	55,000	3,600	100	500	S	38,500	12,400
Major field							
Computer and mathematical sciences, total	34,700	13,600	S	200	S	800	20,000
Computer science and information sciences	23,000	11,200	S	200	S	600	11,000
Mathematics and related sciences	11,700	2,400	S	S	S	300	8,900
Life and related sciences, total	33,400	500	8,000	2,500	S	400	21,800
Agricultural and food sciences	3,800	S	1,000	S	S	S	2,600
Biological sciences	26,800	300	6,900	1,800	S	300	17,500
Environmental life sciences including forestry sciences	2,800	100	200	800	S	S	1,700
Physical and related sciences, total	13,700	400	600	6,200	100	800	5,600
Chemistry, except biochemistry	5,800	S	400	3,100	S	200	2,100
Earth sciences, geology, and oceanography	3,300	S	S	1,500	S	200	1,600
Physics and astronomy	3,800	300	S	1,500	S	400	1,400
Other physical sciences	700	S	S	100	S	S	500
Social and related sciences, total	124,000	2,600	700	300	10,200	900	109,300
Economics	20,100	1,100	200	100	800	100	17,800
Political science and related sciences	25,300	600	S	S	1,200	300	23,200
Psychology	46,700	800	300	S	6,100	300	39,200
Sociology and anthropology	19,500	S	S	S	1,900	S	17,500
Other social sciences	12,400	S	200	200	300	200	11,700
Engineering, total	55,000	3,600	100	500	S	38,500	12,400
Aerospace and related engineering	3,100	200	S	S	S	1,600	1,200
Chemical engineering	2,900	S	S	S	S	2,500	300
Civil and architectural engineering	6,800	S	S	100	S	5,600	1,000
Electrical, electronic, computer and communications engineering	19,600	2,800	S	S	S	12,200	4,400
Industrial engineering	3,500	200	S	S	S	2,300	1,000
Mechanical engineering	12,000	S	S	S	S	9,500	2,400
Other engineering	7,100	200	S	S	S	4,800	2,100

1/ This broad category includes the following occupations: managers and related occupations; health and related occupations; educators other than S&E postsecondary; social services and related occupations; technicians, including computer programmers; sales and marketing occupations; and all other occupations.

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-15. Number of employed 1991 science and engineering bachelor's degree recipients who have a job for which license or certification is required or recommended, and number of these that have license or certificate, by sex and field of degree: April 1993

Major field	Total employed	Number for whom license or certificate required or recommended			Number for whom license or certificate required or recommended who have license or certificate		
		Total	Male	Female	Total	Male	Female
All science and engineering fields	260,700	86,500	46,900	39,700	38,200	20,400	17,800
Major type							
Total science	205,700	66,000	30,000	36,100	32,100	15,000	17,100
Total engineering	55,000	20,500	16,900	3,600	6,100	5,300	700
Major field							
Computer and mathematical sciences, total	34,700	8,700	5,000	3,700	4,800	2,700	2,100
Computer science and information sciences	23,000	3,700	2,300	1,300	1,700	1,200	500
Mathematics and related sciences	11,700	5,100	2,700	2,400	3,100	1,500	1,600
Life and related sciences, total	33,400	12,400	6,300	6,100	5,900	2,700	3,200
Agricultural and food sciences	3,800	1,400	800	600	700	500	200
Biological sciences	26,800	10,300	5,000	5,300	4,800	2,000	2,800
Environmental life sciences including forestry sciences	2,800	800	500	300	400	200	100
Physical and related sciences, total	13,700	3,800	2,600	1,200	2,000	1,400	700
Chemistry, except biochemistry	5,800	1,100	600	500	800	400	400
Earth sciences, geology, and oceanography	3,300	1,500	1,100	400	700	600	100
Physics and astronomy	3,800	700	600	100	300	300	S
Other physical sciences	700	400	200	200	300	100	100
Social and related sciences, total	124,000	41,100	16,200	25,000	19,400	8,200	11,200
Economics	20,100	5,200	3,500	1,700	3,200	2,100	1,100
Political science and related sciences	25,300	9,200	5,500	3,700	3,300	1,900	1,300
Psychology	46,700	16,400	3,900	12,400	7,400	2,100	5,300
Sociology and anthropology	19,500	5,300	1,500	3,900	2,900	800	2,100
Other social sciences	12,400	5,000	1,800	3,200	2,600	1,300	1,300
Engineering, total	55,000	20,500	16,900	3,600	6,100	5,300	700
Aerospace and related engineering	3,100	1,000	800	100	500	500	S
Chemical engineering	2,900	900	700	300	300	300	S
Civil and architectural engineering	6,800	5,400	4,500	900	1,500	1,200	300
Electrical, electronic, computer and communications engineering	19,600	5,200	4,300	900	1,700	1,400	300
Industrial engineering	3,500	1,000	700	300	300	200	S
Mechanical engineering	12,000	4,300	3,800	600	1,200	1,200	S
Other engineering	7,100	2,700	2,200	600	600	600	S

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-16. Number of 1991 science and engineering bachelor's degree recipients who have had a career path job since being awarded most recent degree, and number not having career path job who are seeking one, by sex and field of degree: April 1993

Major field	Total recipients	Number having a career path job			Number not having career path job	Number of those not having a career path job who are seeking a career path job		
		Total	Male	Female		Total	Male	Female
All science and engineering fields	308,500	157,900	90,800	67,200	150,600	82,300	43,600	38,700
Major type								
Total science	247,900	117,200	57,000	60,200	130,700	68,700	31,200	37,500
Total engineering	60,600	40,800	33,800	7,000	19,900	13,600	12,400	1,200
Major field								
Computer and mathematical sciences, total	37,800	22,600	13,700	8,900	15,200	10,600	5,800	4,800
Computer science and information sciences	24,500	16,500	10,800	5,800	8,000	6,600	3,600	3,100
Mathematics and related sciences	13,200	6,000	2,900	3,100	7,200	4,000	2,200	1,700
Life and related sciences, total	47,600	22,300	11,000	11,400	25,300	9,100	4,500	4,600
Agricultural and food sciences	4,200	2,500	1,400	1,100	1,800	900	500	400
Biological sciences	40,000	17,900	8,400	9,500	22,100	7,600	3,600	3,900
Environmental life sciences including forestry sciences	3,400	2,000	1,200	800	1,400	600	400	300
Physical and related sciences, total	16,200	7,800	5,300	2,500	8,400	3,000	2,100	900
Chemistry, except biochemistry	7,300	3,800	2,300	1,500	3,500	1,100	700	400
Earth sciences, geology, and oceanography	3,800	2,000	1,400	700	1,800	700	500	200
Physics and astronomy	4,400	1,600	1,400	200	2,800	1,000	800	200
Other physical sciences	800	400	300	S	400	300	200	100
Social and related sciences, total	146,300	64,500	27,100	37,400	81,800	46,000	18,800	27,200
Economics	22,800	11,200	7,800	3,400	11,500	7,100	4,400	2,700
Political science and related sciences	32,800	12,000	7,000	5,000	20,700	8,600	4,800	3,800
Psychology	54,600	25,600	7,600	18,000	29,000	18,600	5,500	13,100
Sociology and anthropology	22,400	10,300	2,800	7,500	12,100	6,200	1,600	4,600
Other social sciences	13,700	5,300	1,800	3,500	8,400	5,500	2,500	3,000
Engineering, total	60,600	40,800	33,800	7,000	19,900	13,600	12,400	1,200
Aerospace and related engineering	3,500	1,900	1,500	300	1,600	1,100	1,100	S
Chemical engineering	3,300	2,400	1,500	900	1,000	400	300	100
Civil and architectural engineering	7,200	5,600	4,700	900	1,500	1,000	900	S
Electrical, electronic, computer and communications engineering	22,100	14,400	12,400	2,000	7,700	5,400	5,000	500
Industrial engineering	3,700	2,400	1,700	800	1,300	1,000	800	200
Mechanical engineering	12,900	9,400	8,200	1,200	3,500	2,300	2,200	100
Other engineering	7,900	4,700	3,800	900	3,200	2,300	2,200	100

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-17. Number of employed 1991 science and engineering bachelor's degree recipients having job closely, somewhat, and not related to degree, by field of degree: April 1993

Major field	Total employed	Relationship of degree to job		
		Closely related	Somewhat related	Not related
All science and engineering fields	260,700	113,500	82,400	64,800
Major type				
Total science	205,700	83,500	63,500	58,700
Total engineering	55,000	30,000	18,900	6,100
Major field				
Computer and mathematical sciences, total	34,700	20,300	8,100	6,300
Computer science and information sciences	23,000	14,900	4,800	3,300
Mathematics and related sciences	11,700	5,400	3,300	3,000
Life and related sciences, total	33,400	17,000	9,900	6,500
Agricultural and food sciences	3,800	2,400	1,000	400
Biological sciences	26,800	13,000	8,200	5,600
Environmental life sciences including forestry sciences	2,800	1,500	700	600
Physical and related sciences, total	13,700	8,000	3,100	2,500
Chemistry, except biochemistry	5,800	4,000	1,100	800
Earth sciences, geology, and oceanography	3,300	1,400	900	1,000
Physics and astronomy	3,800	2,200	1,000	600
Other physical sciences	700	500	S	100
Social and related sciences, total	124,000	38,200	42,500	43,300
Economics	20,100	4,900	9,000	6,200
Political science and related sciences	25,300	5,900	7,800	11,500
Psychology	46,700	18,800	14,300	13,600
Sociology and anthropology	19,500	5,300	7,700	6,400
Other social sciences	12,400	3,300	3,700	5,500
Engineering, total	55,000	30,000	18,900	6,100
Aerospace and related engineering	3,100	1,500	900	700
Chemical engineering	2,900	1,800	900	200
Civil and architectural engineering	6,800	4,600	1,600	500
Electrical, electronic, computer and communications engineering	19,600	10,100	7,300	2,200
Industrial engineering	3,500	1,400	1,700	400
Mechanical engineering	12,000	6,400	4,500	1,100
Other engineering	7,100	4,200	2,000	900

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.
NOTE: Details may not add to totals because of rounding.
SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-18. Number of employed 1991 science and engineering bachelor's degree recipients, by sex, race/ethnicity, and occupation: April 1993

Occupation	Total employed	Sex		Race/ethnicity				
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native
All employed science and engineering graduates	260,700	144,800	115,900	212,100	16,500	14,000	17,300	900
Occupation type								
Total scientists	50,300	27,700	22,600	41,400	2,500	2,600	3,500	300
Total engineers	41,500	34,300	7,200	32,300	2,200	2,500	4,400	S
Total other occupations	169,000	82,900	86,100	138,500	11,700	8,900	9,300	600
Occupation								
Computer and mathematical scientists	20,700	14,000	6,700	16,000	1,300	1,200	2,000	100
Life and related scientists	9,400	4,600	4,800	7,700	400	600	800	S
Physical scientists	9,700	6,000	3,700	8,300	500	300	600	S
Social and related scientists	10,500	3,000	7,500	9,400	300	500	200	100
Engineers	41,500	34,300	7,200	32,300	2,200	2,500	4,400	S
Managers and related occupations	30,100	18,700	11,400	24,900	2,700	600	1,400	500
Health and related occupations	8,900	3,700	5,200	7,000	900	600	400	S
Educators other than S&E postsecondary	16,100	6,600	9,400	13,000	1,600	1,000	500	S
Social services and related occupations	14,100	3,800	10,400	9,900	1,700	1,300	1,100	200
Technicians including computer programmers	16,700	9,100	7,600	12,300	800	1,100	2,400	S
Sales and marketing occupations	28,300	15,700	12,600	24,700	1,100	1,100	1,400	S
Other occupations	54,900	25,300	29,600	46,700	3,000	3,000	2,100	S

KEY: S = Data values below 100 are suppressed for reasons of confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-19. Number of employed 1991 science and engineering bachelor's degree recipients, by age and occupation: April 1993

Occupation	Total employed	Age				
		Less than 25	25-29	30-34	35-39	40 or more
All employed science and engineering graduates	260,700	141,600	82,900	18,100	8,900	9,200
Occupation type						
Total scientists	50,300	28,800	13,800	4,300	1,900	1,500
Total engineers	41,500	18,300	16,100	4,800	1,600	700
Total other occupations	169,000	94,600	53,000	8,900	5,400	7,000
Occupation						
Computer and mathematical scientists	20,700	9,600	6,900	2,300	1,000	900
Life and related scientists	9,400	6,200	2,400	500	200	S
Physical scientists	9,700	5,900	2,400	900	400	S
Social and related scientists	10,500	7,100	2,200	600	200	500
Engineers	41,500	18,300	16,100	4,800	1,600	700
Managers and related occupations	30,100	16,500	7,800	2,300	1,500	1,900
Health and related occupations	8,900	4,500	2,200	600	500	1,000
Educators other than S&E postsecondary	16,100	9,100	4,700	1,100	600	500
Social services and related occupations	14,100	8,600	3,900	600	500	500
Technicians including computer programmers	16,700	8,100	6,700	1,200	500	200
Sales and marketing occupations	28,300	15,800	9,800	1,100	600	1,000
Other occupations	54,900	31,900	17,800	2,000	1,200	1,900

KEY: S = Data values below 100 are suppressed for reasons of confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-20. Number of employed 1991 science and engineering bachelor's degree recipients, by sector of employment and occupation: April 1993

Occupation	Total employed	Sector of employment						
		Private, for profit company	Self-employed	4-year college and university	Other educational	Nonprofit organizations	Federal government	State or local government
All employed science and engineering graduates	260,700	152,000	6,000	34,300	18,900	19,900	14,100	15,500
Occupation type								
Total scientists	50,300	24,000	300	16,600	800	3,500	2,900	2,200
Total engineers	41,500	31,000	S	4,200	300	400	3,200	2,300
Total other occupations	169,000	97,100	5,600	13,500	17,800	16,000	7,900	11,000
Occupation								
Computer and mathematical scientists	20,700	14,600	200	2,900	300	1,000	1,300	300
Life and related scientists	9,400	2,200	S	4,700	200	700	700	900
Physical scientists	9,700	4,800	S	3,700	S	S	700	400
Social and related scientists	10,500	2,400	S	5,300	200	1,700	200	600
Engineers	41,500	31,000	S	4,200	300	400	3,200	2,300
Managers and related occupations	30,100	20,600	300	1,600	200	2,000	3,500	1,800
Health and related occupations	8,900	3,400	300	1,300	S	2,900	300	600
Educators other than S&E postsecondary	16,100	300	S	1,300	13,500	600	S	400
Social services and related occupations	14,100	2,100	S	1,800	1,700	5,400	S	3,200
Technicians including computer programmers	16,700	11,900	200	2,200	100	400	1,000	900
Sales and marketing occupations	28,300	24,800	2,100	200	100	800	200	S
Other occupations	54,900	34,000	2,700	5,100	2,100	3,900	2,900	4,100

KEY: S = Data values below 100 are suppressed for reasons of confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-21. Number of employed 1991 science and engineering bachelor's degree recipients, by sector of employment and field of degree: April 1993

Major field	Total employed	Sector of employment						
		Private, for profit company	Self-employed	4-year college and university	Other educational	Nonprofit organizations	Federal government	State or local government
All science and engineering fields	260,700	152,000	6,000	34,300	18,900	19,900	14,100	15,500
Major type								
Total science	205,700	112,100	5,100	28,700	18,200	19,100	9,300	13,000
Total engineering	55,000	39,900	900	5,600	700	800	4,700	2,500
Major field								
Computer and mathematical sciences, total	34,700	22,600	200	3,400	3,500	1,700	2,000	1,100
Computer science and information sciences	23,000	16,500	100	1,600	1,000	1,500	1,500	900
Mathematics and related sciences	11,700	6,200	S	1,800	2,500	200	600	300
Life and related sciences, total	33,400	16,300	700	7,300	3,100	2,300	1,900	1,800
Agricultural and food sciences	3,800	2,300	300	600	100	100	100	200
Biological sciences	26,800	12,500	300	6,500	2,700	2,000	1,700	1,100
Environmental life sciences including forestry sciences	2,800	1,500	S	200	300	200	S	500
Physical and related sciences, total	13,700	6,700	100	4,200	1,200	200	800	400
Chemistry, except biochemistry	5,800	3,500	S	1,600	300	100	S	200
Earth sciences, geology, and oceanography	3,300	1,700	S	600	300	100	400	200
Physics and astronomy	3,800	1,200	S	1,900	300	S	300	S
Other physical sciences	700	200	S	S	300	S	S	S
Social and related sciences, total	124,000	66,500	4,100	13,800	10,500	14,900	4,600	9,700
Economics	20,100	15,700	300	900	900	400	900	900
Political science and related sciences	25,300	15,300	300	2,500	1,600	1,800	1,600	2,100
Psychology	46,700	20,000	1,400	7,200	5,100	7,800	1,300	3,900
Sociology and anthropology	19,500	9,100	1,000	1,900	1,400	4,000	400	1,700
Other social sciences	12,400	6,400	1,000	1,300	1,400	900	300	1,100
Engineering, total	55,000	39,900	900	5,600	700	800	4,700	2,500
Aerospace and related engineering	3,100	1,700	S	500	S	S	700	S
Chemical engineering	2,900	2,300	S	400	S	S	100	S
Civil and architectural engineering	6,800	3,700	S	600	S	S	500	1,800
Electrical, electronic, computer and communications engineering	19,600	14,600	400	2,300	300	300	1,400	400
Industrial engineering	3,500	2,800	S	200	100	S	300	S
Mechanical engineering	12,000	9,900	100	900	200	S	900	S
Other engineering	7,100	4,800	300	800	S	400	700	200

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-22. Number of employed 1991 science and engineering bachelor's degree recipients, by primary work activity and field of degree: April 1993

Major field	Total employed	Primary work activity				
		Research and development (R&D)	Computer applications	Manage-ment, sales, admini-stration	Teaching	Other
All science and engineering fields	260,700	57,100	37,700	85,600	29,400	51,000
Major type						
Total science	205,700	33,400	27,600	72,600	27,700	44,400
Total engineering	55,000	23,700	10,100	13,000	1,600	6,600
Major field						
Computer and mathematical sciences, total	34,700	4,800	15,700	7,000	4,000	3,200
Computer science and information sciences	23,000	3,500	13,200	3,800	900	1,500
Mathematics and related sciences	11,700	1,300	2,500	3,100	3,100	1,700
Life and related sciences, total	33,400	11,700	2,100	7,600	4,400	7,500
Agricultural and food sciences	3,800	1,000	100	1,500	300	800
Biological sciences	26,800	10,000	1,600	5,200	3,900	5,900
Environmental life sciences including forestry sciences	2,800	600	400	800	200	800
Physical and related sciences, total	13,700	5,200	1,000	2,700	2,500	2,200
Chemistry, except biochemistry	5,800	3,000	S	1,300	700	800
Earth sciences, geology, and oceanography	3,300	900	200	800	500	900
Physics and astronomy	3,800	1,200	700	600	1,000	400
Other physical sciences	700	100	S	S	300	100
Social and related sciences, total	124,000	11,700	8,700	55,300	16,800	31,500
Economics	20,100	1,800	2,000	11,900	1,000	3,600
Political science and related sciences	25,300	2,700	2,100	12,000	2,400	6,100
Psychology	46,700	3,300	3,200	18,200	9,100	12,900
Sociology and anthropology	19,500	2,300	1,300	8,000	2,300	5,600
Other social sciences	12,400	1,600	200	5,200	2,100	3,400
Engineering, total	55,000	23,700	10,100	13,000	1,600	6,600
Aerospace and related engineering	3,100	1,200	400	700	300	400
Chemical engineering	2,900	1,600	300	600	S	400
Civil and architectural engineering	6,800	3,200	900	2,200	100	500
Electrical, electronic, computer and communications engineering	19,600	8,200	6,000	2,400	300	2,700
Industrial engineering	3,500	600	600	1,700	200	400
Mechanical engineering	12,000	6,300	800	3,100	500	1,400
Other engineering	7,100	2,700	1,000	2,400	200	900

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Primary work activity is defined as activity in which respondent worked most hours on job in typical work week. Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-23. Number of employed 1991 science and engineering bachelor's degree recipients, by primary work activity and occupation: April 1993

Occupation	Total employed	Primary work activity				
		Research and development (R&D)	Computer applications	Management, sales, administration	Teaching	Other
All employed science and engineering graduates	260,700	57,100	37,700	85,600	29,400	51,000
Occupation type						
Total scientists	50,300	21,000	13,200	4,100	7,100	4,900
Total engineers	41,500	22,200	5,800	8,900	800	3,700
Total other occupations	169,000	13,900	18,700	72,600	21,400	42,400
Occupation						
Computer and mathematical scientists	20,700	4,900	12,000	1,600	1,500	600
Life and related scientists	9,400	6,300	200	300	1,500	1,000
Physical scientists	9,700	5,400	500	1,300	1,400	1,000
Social and related scientists	10,500	4,400	400	900	2,700	2,200
Engineers	41,500	22,200	5,800	8,900	800	3,700
Managers and related occupations	30,100	1,500	2,400	22,700	300	3,100
Health and related occupations	8,900	900	S	1,100	700	6,100
Educators other than S&E postsecondary	16,100	1,000	100	S	14,500	400
Social services and related occupations	14,100	400	S	3,200	2,800	7,600
Technicians including computer programmers	16,700	5,600	8,500	1,400	S	1,300
Sales and marketing occupations	28,300	900	1,000	23,800	200	2,400
Other occupations	54,900	3,500	6,600	20,300	2,900	21,500

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Primary work activity is defined as activity in which respondent worked most hours on job in typical work week. Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-24. Number of employed 1991 science and engineering bachelor's degree recipients whose work is supported by federal government, and agency giving support, by field of degree: April 1993

Major field	Total employed	Number whose work is supported by federal government	Agency supporting work							
			Department of Defense	Department of Education	Department of Energy	EPA	NASA	NIH	NSF	Other
All science and engineering fields	260,700	36,100	8,500	3,500	2,400	2,400	1,800	6,500	3,300	5,200
Major type										
Total science	205,700	27,700	4,600	3,500	1,800	1,800	1,100	6,200	2,600	4,700
Total engineering	55,000	8,400	3,900	S	600	600	700	300	700	500
Major field										
Computer and mathematical sciences, total	34,700	4,500	2,300	400	500	S	600	100	200	200
Computer science and information sciences	23,000	3,800	2,000	200	500	S	600	S	100	200
Mathematics and related sciences	11,700	700	300	100	S	S	S	100	100	S
Life and related sciences, total	33,400	7,000	300	200	500	900	200	4,000	600	1,000
Agricultural and food sciences	3,800	300	S	S	S	S	S	S	S	S
Biological sciences	26,800	5,800	200	200	300	500	200	3,900	600	900
Environmental life sciences including forestry sciences	2,800	800	100	S	100	400	S	S	S	S
Physical and related sciences, total	13,700	3,200	900	200	400	200	200	400	1,100	S
Chemistry, except biochemistry	5,800	1,400	400	100	200	200	S	300	400	S
Earth sciences, geology, and oceanography	3,300	400	100	S	S	S	S	S	100	S
Physics and astronomy	3,800	1,100	300	S	200	S	100	S	600	S
Other physical sciences	700	200	S	S	S	S	S	S	S	S
Social and related sciences, total	124,000	13,000	1,100	2,700	500	600	S	1,700	600	3,400
Economics	20,100	1,000	300	100	100	S	S	S	S	S
Political science and related sciences	25,300	2,300	500	400	S	300	S	S	200	300
Psychology	46,700	6,300	300	1,400	200	200	S	1,300	S	2,300
Sociology and anthropology	19,500	2,600	S	400	S	100	S	300	100	700
Other social sciences	12,400	900	S	500	200	S	S	200	300	S
Engineering, total	55,000	8,400	3,900	S	600	600	700	300	700	500
Aerospace and related engineering	3,100	700	300	S	S	S	300	S	S	S
Chemical engineering	2,900	300	100	S	S	S	S	S	S	S
Civil and architectural engineering	6,800	2,200	300	S	S	300	S	S	200	200
Electrical, electronic, computer and communications engineering	19,600	2,900	1,800	S	200	S	400	S	200	S
Industrial engineering	3,500	200	100	S	S	S	S	S	S	S
Mechanical engineering	12,000	1,200	900	S	100	S	S	S	S	S
Other engineering	7,100	1,000	400	S	S	200	S	S	100	S

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Respondent's work may be supported by more than one federal agency. Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-25. Median salary of full-time employed 1991 bachelor's degree recipients, by sex, race/ethnicity, and field of degree: April 1993

Major field	Total	Sex		Race/ethnicity				
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native
All science and engineering fields	$25,300	$28,000	$23,000	$25,200	$24,000	$25,800	$30,000	S
Major type								
Total science	23,400	25,000	22,000	23,400	23,000	23,000	26,000	S
Total engineering	35,000	35,000	36,000	35,000	36,000	36,000	33,000	S
Major field								
Computer and mathematical sciences, total	30,000	32,000	28,000	31,000	23,000	32,500	30,000	S
Computer science and information sciences	32,500	33,000	30,000	33,300	23,000	S	30,000	S
Mathematics and related sciences	26,000	27,000	23,400	25,000	S	S	S	S
Life and related sciences, total	22,500	23,500	22,000	22,500	S	S	S	S
Agricultural and food sciences	22,000	22,000	20,800	22,000	S	S	S	S
Biological sciences	22,500	24,000	22,000	22,800	S	S	S	S
Environmental life sciences including forestry sciences	23,000	21,800	24,500	22,900	S	S	S	S
Physical and related sciences, total	26,000	26,000	25,000	26,000	S	25,000	26,800	S
Chemistry, except biochemistry	26,800	26,800	26,500	27,000	S	S	S	S
Earth sciences, geology, and oceanography	25,000	26,000	S	25,000	S	S	S	S
Physics and astronomy	25,500	25,000	S	25,000	S	S	S	S
Other physical sciences	25,000	26,000	S	25,200	S	S	S	S
Social and related sciences, total	22,000	23,000	21,000	22,000	23,000	21,200	23,500	S
Economics	25,000	25,000	26,000	26,000	S	S	S	S
Political science and related sciences	23,000	24,000	22,800	22,800	S	S	S	S
Psychology	20,000	22,000	19,200	20,000	S	S	S	S
Sociology and anthropology	21,000	20,000	21,000	21,000	S	S	S	S
Other social sciences	23,000	24,000	23,000	24,000	S	S	S	S
Engineering, total	35,000	35,000	36,000	35,000	36,000	36,000	33,000	S
Aerospace and related engineering	30,000	30,000	34,400	30,000	S	S	S	S
Chemical engineering	41,700	41,000	42,000	41,700	S	S	S	S
Civil and architectural engineering	32,000	32,000	32,500	32,000	S	S	S	S
Electrical, electronic, computer and communications engineering	36,000	35,000	37,000	36,000	S	S	33,000	S
Industrial engineering	34,000	35,000	33,000	35,000	32,000	30,000	S	S
Mechanical engineering	36,000	36,000	38,000	36,000	S	S	S	S
Other engineering	33,000	32,000	36,000	33,500	S	S	S	S

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. Unweighted cell size is less than 20.

NOTE: Salary for self-employed persons and for full-time students is not included in data presented in tables.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993.

Table B-26. Median salary of full-time employed 1991 bachelor's degree recipients, by sex, race/ethnicity, and occupation: April 1993

Occupation	Total	Sex		Race/ethnicity				
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native
All employed science and engineering graduates	$25,300	$28,000	$23,000	$25,200	$24,000	$25,800	$30,000	S
Occupation type								
Total scientists	29,000	31,000	27,000	28,500	26,700	25,800	32,000	S
Total engineers	36,000	36,000	37,000	36,000	37,000	38,000	35,000	S
Total other occupations	22,800	24,000	21,600	22,700	22,500	22,000	23,400	S
Occupation								
Computer and mathematical scientists	34,000	34,000	33,000	34,000	S	S	34,000	S
Life and related scientists	24,400	25,000	24,400	24,400	S	S	S	S
Physical scientists	26,000	27,600	25,000	26,000	S	S	S	S
Social and related scientists	19,000	18,000	19,000	19,000	S	S	S	S
Engineers	36,000	36,000	37,000	36,000	37,000	38,000	35,000	S
Managers and related occupations	26,000	26,000	26,000	26,000	24,000	S	S	S
Health and related occupations 1/	21,000	20,800	21,000	22,000	S	S	S	S
Educators other than S&E postsecondary	22,000	21,600	22,000	22,000	S	S	S	S
Social services and related occupations	18,800	19,000	18,400	17,800	S	S	S	S
Technicians including computer programmers	26,800	29,700	25,000	26,000	S	S	28,800	S
Sales and marketing occupations	25,000	25,000	24,000	25,000	S	S	S	S
Other occupations	20,000	20,000	19,800	20,000	20,000	19,800	S	S

1/ Health-related majors are not included in the sample. Salaries are not representative of those received by health-related occupations.

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. Unweighted cell size is less than 20.

NOTE: Salary for self-employed persons and for full-time students is not included in data presented in tables.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates (NSRCG), 1993

Table B-27. Median salary of full-time employed 1991 bachelor's degree recipients, by broad sector of employment and field of degree: April 1993

Major field	Total	Broad sector of employment		
		Private industry and business 1/	Educational institution	Government
All science and engineering fields	$25,300	$26,800	$21,400	$25,000
Major type				
Total science	23,400	24,000	21,300	24,000
Total engineering	35,000	35,500	24,000	32,000
Major field				
Computer and mathematical sciences, total	30,000	32,000	22,000	26,000
Computer science and information sciences	32,500	33,000	S	26,000
Mathematics and related sciences	26,000	28,800	22,000	S
Life and related sciences, total	22,500	23,000	21,300	22,700
Agricultural and food sciences	22,000	22,000	S	S
Biological sciences	22,500	23,400	21,300	22,700
Environmental life sciences including forestry sciences	23,000	23,000	S	26,000
Physical and related sciences, total	26,000	27,000	21,000	25,000
Chemistry, except biochemistry	26,800	27,600	S	S
Earth sciences, geology, and oceanography	25,000	26,000	S	S
Physics and astronomy	25,500	27,000	S	29,000
Other physical sciences	25,000	S	S	S
Social and related sciences, total	22,000	22,000	21,000	23,500
Economics	25,000	25,200	S	S
Political science and related sciences	23,000	24,000	S	24,100
Psychology	20,000	20,000	22,000	20,000
Sociology and anthropology	21,000	21,000	S	S
Other social sciences	23,000	22,300	S	S
Engineering, total	35,000	35,500	24,000	32,000
Aerospace and related engineering	30,000	32,000	S	26,400
Chemical engineering	41,700	42,000	S	S
Civil and architectural engineering	32,000	32,000	S	34,000
Electrical, electronic, computer and communications engineering	36,000	36,000	S	S
Industrial engineering	34,000	35,000	S	30,000
Mechanical engineering	36,000	36,000	S	S
Other engineering	33,000	35,000	S	26,400

1/ Nonprofit included with private industry and business

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. Unweighted cell size less than 20.

NOTE: Salary for self-employed persons and for full-time students is not included in data presented in tables.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993.

Table B-28. Mean salary of full-time employed 1991 bachelor's degree recipients, by broad sector of employment and occupation: April 1993

Occupation	Total	Broad sector of employment		
		Private industry and business 1/	Educational institution	Government
All employed science and engineering graduates	$25,300	$26,800	$21,400	$25,000
Occupation type				
Total scientists	29,000	31,000	22,000	25,000
Total engineers	36,000	36,000	S	35,000
Total other occupations	22,800	23,000	21,000	23,500
Occupation				
Computer and mathematical scientists	34,000	34,000	S	32,000
Life and related scientists	24,400	30,000	S	S
Physical scientists	26,000	27,600	S	23,900
Social and related scientists	19,000	17,200	S	S
Engineers	36,000	36,000	S	35,000
Managers and related occupations	26,000	26,000	S	26,400
Health and related occupations 2/	21,000	21,000	S	S
Educators other than S&E postsecondary	22,000	S	22,000	S
Social services and related occupations	18,800	17,200	S	20,000
Technicians including computer programmers	26,800	28,800	S	18,900
Sales and marketing occupations	25,000	25,000	S	S
Other occupations	20,000	19,800	18,000	24,000

1/ Nonprofit included with private industry and business

2/ Health-related majors are not included in sample. Salaries are not representative of those received by health-related occupations.

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. Unweighted cell size is less than 20.

NOTE: Salary for self-employed persons and for full-time students is not included in data presented in table.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-29. Number of 1992 science and engineering bachelor's degree recipients, by sex, race/ethnicity, and field of degree: April 1993

Major field	Total recipients	Sex		Race/ethnicity				
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native
All science and engineering fields	330,900	184,000	146,900	266,900	23,900	13,800	25,400	900
Major type								
Total science	273,200	133,800	139,400	221,900	21,300	11,100	18,100	700
Total engineering	57,700	50,200	7,600	44,900	2,600	2,600	7,300	200
Major field								
Computer and mathematical sciences, total	39,800	23,700	16,100	29,400	4,100	1,600	4,500	100
Computer science and information sciences	25,700	16,800	9,000	17,700	3,000	1,300	3,600	100
Mathematics and related sciences	14,100	6,900	7,200	11,700	1,200	300	900	S
Life and related sciences, total	52,100	27,000	25,100	41,100	3,300	2,300	5,200	200
Agricultural and food sciences	4,900	3,100	1,800	4,600	S	100	S	S
Biological sciences	43,300	21,300	22,000	32,700	3,200	2,100	5,100	200
Environmental life sciences including forestry sciences	3,900	2,600	1,300	3,800	S	S	S	S
Physical and related sciences, total	17,500	12,000	5,500	14,800	800	700	1,200	S
Chemistry, except biochemistry	8,600	5,600	3,000	7,100	600	300	700	S
Earth sciences, geology, and oceanography	3,800	2,300	1,500	3,500	S	200	S	S
Physics and astronomy	4,700	3,800	900	3,800	200	100	500	S
Other physical sciences	500	400	100	400	S	100	S	S
Social and related sciences, total	163,700	71,100	92,600	136,600	13,000	6,500	7,200	300
Economics	23,700	16,800	6,900	19,500	1,500	800	2,000	S
Political science and related sciences	41,800	24,400	17,400	35,100	2,700	2,000	1,700	200
Psychology	61,100	17,500	43,600	51,500	5,200	2,200	2,200	S
Sociology and anthropology	24,900	6,900	18,000	19,800	2,900	1,000	1,000	200
Other social sciences	12,200	5,600	6,600	10,700	800	500	300	S
Engineering, total	57,700	50,200	7,600	44,900	2,600	2,600	7,300	200
Aerospace and related engineering	3,800	3,500	300	3,200	100	200	300	S
Chemical engineering	3,400	2,200	1,200	2,800	200	100	300	S
Civil and architectural engineering	8,400	7,100	1,300	6,500	300	500	1,000	S
Electrical, electronic, computer and communications engineering	19,700	17,900	1,800	13,700	1,100	1,000	3,800	S
Industrial engineering	4,000	3,000	1,000	3,200	300	200	300	S
Mechanical engineering	12,200	11,200	1,000	10,300	300	500	1,000	100
Other engineering	6,200	5,300	900	5,200	300	100	700	S

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-30. Number of 1992 science and engineering bachelor's degree recipients, by race/ethnicity, sex, and field of degree: April 1993

Major field	Race/ethnicity									
	White, non-Hispanic		Black, non-Hispanic		Hispanic		Asian or Pacific Islander		American Indian/ Alaskan Native	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
All science and engineering fields	151,000	115,800	9,200	14,700	8,100	5,700	15,200	10,200	400	500
Major type										
Total science	111,300	110,700	7,100	14,200	5,800	5,300	9,400	8,700	200	500
Total engineering	39,800	5,100	2,100	500	2,300	400	5,800	1,600	200	S
Major field										
Computer and mathematical sciences, total	18,600	10,800	1,300	2,900	900	700	2,700	1,800	100	S
Computer science and information sciences	12,800	4,900	1,000	2,000	700	600	2,200	1,500	100	S
Mathematics and related sciences	5,800	5,900	300	900	200	S	500	300	S	S
Life and related sciences, total	22,700	18,500	900	2,400	1,500	800	1,900	3,300	S	200
Agricultural and food sciences	2,900	1,700	S	S	S	S	S	S	S	S
Biological sciences	17,300	15,500	800	2,400	1,400	700	1,900	3,200	S	200
Environmental life sciences including forestry sciences	2,500	1,300	S	S	S	S	S	S	S	S
Physical and related sciences, total	10,200	4,600	400	400	500	100	900	400	S	S
Chemistry, except biochemistry	4,800	2,300	200	400	200	S	400	300	S	S
Earth sciences, geology, and oceanography	2,100	1,400	S	S	100	S	S	S	S	S
Physics and astronomy	3,000	700	200	S	100	S	400	100	S	S
Other physical sciences	300	S	S	S	S	S	S	S	S	S
Social and related sciences, total	59,800	76,800	4,600	8,400	2,800	3,700	4,000	3,300	S	300
Economics	13,700	5,800	1,000	500	800	S	1,400	600	S	S
Political science and related sciences	21,200	14,000	1,400	1,400	1,100	1,000	800	1,000	S	200
Psychology	14,500	37,000	1,500	3,700	300	1,800	1,200	1,000	S	S
Sociology and anthropology	5,500	14,400	400	2,400	500	600	500	500	S	200
Other social sciences	5,000	5,700	300	500	200	300	200	200	S	S
Engineering, total	39,800	5,100	2,100	500	2,300	400	5,800	1,600	200	S
Aerospace and related engineering	2,900	300	100	S	200	S	300	S	S	S
Chemical engineering	1,800	1,000	100	S	S	100	200	S	S	S
Civil and architectural engineering	5,700	900	200	S	500	S	700	300	S	S
Electrical, electronic, computer and communications engineering	12,900	900	1,000	200	900	S	3,100	600	S	S
Industrial engineering	2,400	700	200	S	200	S	200	100	S	S
Mechanical engineering	9,600	800	200	S	500	S	800	200	100	S
Other engineering	4,600	600	300	S	S	S	500	200	S	S

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-31. Number of 1992 science and engineering bachelor's degree recipients, by age and field of degree: April 1993

Major field	Total recipients	Age: Less than 25	25-29	30-34	35-39	40 or more
All science and engineering fields	330,900	233,200	56,300	19,200	10,300	11,900
Major type						
Total science	273,200	195,200	43,800	14,100	9,000	11,100
Total engineering	57,700	38,000	12,500	5,100	1,300	800
Major field						
Computer and mathematical sciences, total	39,800	22,600	8,900	3,100	3,100	2,100
Computer science and information sciences	25,700	12,800	6,500	2,300	2,500	1,700
Mathematics and related sciences	14,100	9,800	2,400	800	700	300
Life and related sciences, total	52,100	40,500	8,400	1,700	1,200	400
Agricultural and food sciences	4,900	3,300	1,000	500	100	S
Biological sciences	43,300	34,100	6,900	1,000	900	300
Environmental life sciences including forestry sciences	3,900	3,100	500	200	100	S
Physical and related sciences, total	17,500	12,200	3,100	1,200	400	600
Chemistry, except biochemistry	8,600	6,400	1,500	500	100	200
Earth sciences, geology, and oceanography	3,800	2,100	600	500	100	400
Physics and astronomy	4,700	3,400	900	200	S	S
Other physical sciences	500	300	100	S	S	S
Social and related sciences, total	163,700	119,900	23,300	8,100	4,400	8,000
Economics	23,700	18,900	3,500	800	100	500
Political science and related sciences	41,800	31,600	7,300	1,500	300	1,100
Psychology	61,100	46,000	7,600	3,000	1,900	2,600
Sociology and anthropology	24,900	16,400	3,300	1,500	1,200	2,400
Other social sciences	12,200	7,100	1,600	1,200	900	1,400
Engineering, total	57,700	38,000	12,500	5,100	1,300	800
Aerospace and related engineering	3,800	3,200	600	S	S	S
Chemical engineering	3,400	2,600	600	200	S	S
Civil and architectural engineering	8,400	5,600	1,700	700	200	100
Electrical, electronic, computer and communications engineering	19,700	11,100	5,200	2,500	400	400
Industrial engineering	4,000	2,800	900	200	S	S
Mechanical engineering	12,200	8,100	2,800	800	400	100
Other engineering	6,200	4,500	800	600	200	200

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-32. Number of 1992 science and engineering bachelor's degree recipients residing in the United States who are U.S. citizens, foreign born, and number who attended a foreign high school, by field of degree: April 1993

Major field	Total recipients	U.S. citizens [1]	Foreign born [1]	Attended foreign high school [2]
All science and engineering fields	330,900	316,600	36,400	13,400
Major type				
Total science	273,200	262,700	26,900	9,000
Total engineering	57,700	53,900	9,500	4,400
Major field				
Computer and mathematical sciences, total	39,800	36,900	6,200	3,300
Computer science and information sciences	25,700	23,400	4,700	2,800
Mathematics and related sciences	14,100	13,500	1,400	500
Life and related sciences, total	52,100	50,200	6,000	1,300
Agricultural and food sciences	4,900	4,900	S	S
Biological sciences	43,300	41,400	5,900	1,200
Environmental life sciences including forestry sciences	3,900	3,900	100	S
Physical and related sciences, total	17,500	16,400	2,100	1,100
Chemistry, except biochemistry	8,600	8,100	1,100	500
Earth sciences, geology, and oceanography	3,800	3,600	300	100
Physics and astronomy	4,700	4,100	700	500
Other physical sciences	500	500	S	S
Social and related sciences, total	163,700	159,200	12,600	3,200
Economics	23,700	22,300	2,800	1,500
Political science and related sciences	41,800	40,700	3,600	800
Psychology	61,100	59,700	3,600	500
Sociology and anthropology	24,900	24,600	1,900	200
Other social sciences	12,200	11,900	800	200
Engineering, total	57,700	53,900	9,500	4,400
Aerospace and related engineering	3,800	3,700	600	100
Chemical engineering	3,400	3,200	300	200
Civil and architectural engineering	8,400	7,900	1,000	400
Electrical, electronic, computer and communications engineering	19,700	17,500	5,200	2,300
Industrial engineering	4,000	3,800	400	100
Mechanical engineering	12,200	11,800	1,200	500
Other engineering	6,200	5,900	800	800

1/ Some U.S. citizens are foreign-born. Therefore, the separate columns do not add to the "Total recipients" total.
2/ Data include both U.S. citizens and foreign nationals.
KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.
NOTE: Details may not add to totals because of rounding.
SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-33. Number of 1992 science and engineering bachelor's degree recipients residing in the United States who are native-born or naturalized U.S. citizens, and number who are permanent or temporary residents, by field of degree: April 1993

Major field	Total recipients	U.S. citizen		Non-U.S. citizen	
		Native born	Naturalized	Permanent resident	Temporary resident/ other
All science and engineering fields	330,900	298,900	17,700	9,400	4,900
Major type					
Total science	273,200	249,700	13,000	7,000	3,500
Total engineering	57,700	49,200	4,700	2,400	1,400
Major field					
Computer and mathematical sciences, total	39,800	34,300	2,600	1,800	1,100
Computer science and information sciences	25,700	21,500	1,900	1,400	900
Mathematics and related sciences	14,100	12,800	700	400	200
Life and related sciences, total	52,100	46,600	3,600	1,400	600
Agricultural and food sciences	4,900	4,900	S	S	S
Biological sciences	43,300	37,900	3,500	1,300	600
Environmental life sciences including forestry sciences	3,900	3,800	S	S	S
Physical and related sciences, total	17,500	15,600	700	600	600
Chemistry, except biochemistry	8,600	7,600	500	300	200
Earth sciences, geology, and oceanography	3,800	3,600	S	100	S
Physics and astronomy	4,700	3,900	200	200	400
Other physical sciences	500	500	S	S	S
Social and related sciences, total	163,700	153,200	6,100	3,300	1,200
Economics	23,700	20,900	1,400	1,000	400
Political science and related sciences	41,800	39,100	1,500	800	400
Psychology	61,100	58,000	1,700	1,000	300
Sociology and anthropology	24,900	23,500	1,100	200	S
Other social sciences	12,200	11,600	300	300	S
Engineering, total	57,700	49,200	4,700	2,400	1,400
Aerospace and related engineering	3,800	3,400	300	S	S
Chemical engineering	3,400	3,100	200	100	S
Civil and architectural engineering	8,400	7,400	600	300	200
Electrical, electronic, computer and communications engineering	19,700	15,100	2,500	1,300	800
Industrial engineering	4,000	3,600	200	100	S
Mechanical engineering	12,200	11,300	500	200	200
Other engineering	6,200	5,400	500	300	S

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-34. Number of 1992 science and engineering bachelor's degree recipients who received financial support from various sources for 1992 bachelor's degree, by field: April 1993

Major field	Total recip-ients	Sources of support							
		Earnings from employ-ment	Gifts from parents/ relatives	Scholar-ships, grants, fellow-ships	Loans from college, bank, govern-ment	Assistant-ships, work study	Employee assis-tance	Loans from parents or relatives	Other sources
All science and engineering fields	330,900	237,500	238,400	181,300	147,300	82,100	27,900	33,400	5,600
Major type									
Total science	273,200	191,700	198,200	146,400	122,500	69,700	20,800	25,600	4,700
Total engineering	57,700	45,900	40,200	34,800	24,900	12,300	7,100	7,700	1,000
Major field									
Computer and mathematical sciences, total	39,800	29,400	23,800	22,800	18,500	11,400	6,000	3,100	400
Computer science and information sciences	25,700	19,800	14,600	13,100	11,800	7,400	4,800	2,300	100
Mathematics and related sciences	14,100	9,500	9,200	9,700	6,700	3,900	1,200	800	200
Life and related sciences, total	52,100	38,300	39,400	32,000	24,700	14,700	3,200	5,100	500
Agricultural and food sciences	4,900	4,100	3,400	3,500	2,300	1,400	400	800	S
Biological sciences	43,300	31,500	32,800	26,700	21,200	12,500	2,600	3,800	400
Environmental life sciences including forestry sciences	3,900	2,600	3,300	1,800	1,200	800	300	500	S
Physical and related sciences, total	17,500	12,300	12,300	11,200	7,700	5,500	1,700	1,500	300
Chemistry, except biochemistry	8,600	6,100	6,200	5,600	3,600	2,800	1,100	800	S
Earth sciences, geology, and oceanography	3,800	2,800	2,200	2,100	1,800	1,000	300	400	S
Physics and astronomy	4,700	3,000	3,500	3,300	2,000	1,400	300	300	200
Other physical sciences	500	400	300	300	300	200	S	S	S
Social and related sciences, total	163,700	111,700	122,700	80,400	71,600	38,200	9,900	15,900	3,400
Economics	23,700	16,800	19,200	11,900	9,100	5,300	1,200	1,300	700
Political science and related sciences	41,800	28,500	33,200	20,900	17,800	[illegible]	2,700	4,300	800
Psychology	61,100	40,100	46,600	29,700	27,200	16,000	3,700	6,800	1,200
Sociology and anthropology	24,900	16,300	15,700	11,900	12,000	6,300	1,300	1,900	500
Other social sciences	12,200	10,000	8,100	5,900	5,500	1,100	1,100	1,500	300
Engineering, total	57,700	45,900	40,200	34,800	24,900	12,300	7,100	7,700	1,000
Aerospace and related engineering	3,800	2,500	3,100	2,300	1,500	700	300	500	S
Chemical engineering	3,400	2,900	2,700	2,500	1,600	1,000	400	400	S
Civil and architectural engineering	8,400	6,600	6,000	4,700	3,800	1,700	600	1,200	100
Electrical, electronic, computer and communications	19,700	15,800	12,500	11,800	8,000	3,800	3,100	2,300	300
Industrial engineering	4,000	3,000	3,100	2,300	1,500	800	300	700	S
Mechanical engineering	12,200	10,400	8,500	7,400	5,500	2,400	1,900	2,100	300
Other engineering	6,200	4,800	4,400	3,900	2,900	2,000	400	700	S

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Respondents may have [illegible] sources of support. Therefore, column entries will not add to "Total recipients."

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-35. Number of 1992 science and engineering bachelor's degree recipients who have taken additional courses since most recent degree and enrollment status on April 15, 1993, by field of degree: April 1993

Major field	Total recipients	Have taken additional courses since most recent degree 1/	April 15, 1993 status		
			Full-time student	Part-time student	Not student
All science and engineering fields	330,900	122,600	71,800	28,100	230,900
Major type					
Total science	273,200	104,700	62,600	22,700	187,900
Total engineering	57,700	18,000	9,300	5,400	43,100
Major field					
Computer and mathematical sciences, total	39,800	11,000	4,900	3,400	31,500
Computer science and information sciences	25,700	5,100	1,400	2,200	22,100
Mathematics and related sciences	14,100	5,900	3,500	1,200	9,400
Life and related sciences, total	52,100	25,800	18,400	3,800	29,900
Agricultural and food sciences	4,900	1,500	1,000	200	3,700
Biological sciences	43,300	23,200	16,700	3,400	23,200
Environmental life sciences including forestry sciences	3,900	1,100	700	200	3,000
Physical and related sciences, total	17,500	9,500	7,200	900	9,500
Chemistry, except biochemistry	8,600	4,800	3,700	500	4,400
Earth sciences, geology, and oceanography	3,800	1,500	1,100	200	2,500
Physics and astronomy	4,700	2,900	2,200	200	2,200
Other physical sciences	500	300	100	S	400
Social and related sciences, total	163,700	58,500	32,100	14,600	117,100
Economics	23,700	6,700	4,000	1,800	18,000
Political science and related sciences	41,800	14,300	8,000	3,100	30,800
Psychology	61,100	24,400	13,600	6,400	41,000
Sociology and anthropology	24,900	9,000	4,600	2,100	18,200
Other social sciences	12,200	4,100	1,900	1,200	9,100
Engineering, total	57,700	18,000	9,300	5,400	43,100
Aerospace and related engineering	3,800	1,300	900	300	2,700
Chemical engineering	3,400	800	400	200	2,800
Civil and architectural engineering	8,400	2,000	1,200	500	6,700
Electrical, electronic, computer and communications engineering	19,700	6,900	3,200	2,400	14,100
Industrial engineering	4,000	1,000	300	400	3,200
Mechanical engineering	12,200	3,700	1,900	1,100	9,200
Other engineering	6,200	2,300	1,400	500	4,300

1/ Excludes those receiving a degree between April 15 and date of interview (May-November 1993)

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-36. Number of 1992 science and engineering bachelor's degree recipients who have not taken courses since most recent degree, and likelihood they will take additional courses, by field of degree: April 1993

Major field	Total number not taking courses since most recent degree 1/	Likelihood will take classes		
		Very likely	Somewhat likely	Very unlikely
All science and engineering fields	191,000	142,600	37,500	10,500
Major type				
Total science	153,000	117,400	28,300	7,700
Total engineering	37,100	25,200	9,200	2,700
Major field				
Computer and mathematical sciences, total	27,100	17,900	7,400	1,800
Computer science and information sciences	19,900	12,700	5,700	1,600
Mathematics and related sciences	7,100	5,200	1,700	200
Life and related sciences, total	23,100	18,100	4,100	900
Agricultural and food sciences	3,300	1,600	900	800
Biological sciences	17,100	14,300	2,800	S
Environmental life sciences including forestry sciences	2,700	2,100	400	100
Physical and related sciences, total	7,400	5,700	1,500	300
Chemistry, except biochemistry	3,600	2,600	800	200
Earth sciences, geology, and oceanography	2,100	1,500	500	S
Physics and astronomy	1,500	1,300	100	S
Other physical sciences	200	200	S	S
Social and related sciences, total	96,000	75,800	15,400	4,800
Economics	15,800	12,000	2,600	1,300
Political science and related sciences	25,100	21,500	2,900	800
Psychology	32,600	26,600	5,000	1,000
Sociology and anthropology	15,300	11,100	3,000	1,200
Other social sciences	7,100	4,600	1,900	600
Engineering, total	37,100	25,200	9,200	2,700
Aerospace and related engineering	2,300	1,800	400	100
Chemical engineering	2,500	1,700	700	100
Civil and architectural engineering	6,100	3,600	2,000	500
Electrical, electronic, computer and communications engineering	11,600	7,700	2,900	1,000
Industrial engineering	2,900	2,200	500	200
Mechanical engineering	8,100	5,700	2,000	500
Other engineering	3,700	2,600	700	400

1/ Excludes those receiving a degree between April 15 and date of interview (May-November 1993)

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-37. Number of 1992 science and engineering bachelor's degree recipients who have taken courses since most recent degree, and type of degree sought, by field of degree: April 1993

Major field	Total recipients	Have taken additional courses since most recent degree 1/	Types of degree sought				
			No specific degree	Ph.D. degree	Prof degree	MA degree	Other or BA degree
All science and engineering fields	330,900	122,600	28,300	12,100	21,100	52,000	9,100
Major type							
Total science	273,200	104,700	24,900	11,000	20,800	39,000	8,900
Total engineering	57,700	18,000	3,300	1,100	300	13,000	300
Major field							
Computer and mathematical sciences, total	39,800	11,000	2,900	800	400	6,200	800
Computer science and information sciences	25,700	5,100	1,400	100	100	3,000	400
Mathematics and related sciences	14,100	5,900	1,400	700	200	3,200	400
Life and related sciences, total	52,100	25,800	5,600	3,100	8,900	6,600	1,600
Agricultural and food sciences	4,900	1,500	100	200	200	900	S
Biological sciences	43,300	23,200	5,100	2,900	8,400	5,300	1,500
Environmental life sciences including forestry sciences	3,900	1,100	300	S	200	500	S
Physical and related sciences, total	17,500	9,500	1,400	3,600	1,200	3,000	300
Chemistry, except biochemistry	8,600	4,800	600	2,100	1,000	1,000	100
Earth sciences, geology, and oceanography	3,800	1,500	400	200	S	800	S
Physics and astronomy	4,700	2,900	300	1,200	100	1,200	100
Other physical sciences	500	300	100	S	S	S	S
Social and related sciences, total	163,700	58,500	15,100	3,600	10,400	23,200	6,200
Economics	23,700	6,700	1,400	S	1,900	2,700	700
Political science and related sciences	41,800	14,300	3,500	300	4,400	3,800	2,300
Psychology	61,100	24,400	5,400	2,700	2,700	11,700	2,000
Sociology and anthropology	24,900	9,000	3,700	300	1,000	3,000	1,000
Other social sciences	12,200	4,100	1,100	300	500	2,200	200
Engineering, total	57,700	18,000	3,300	1,100	300	13,000	300
Aerospace and related engineering	3,800	1,300	200	S	S	900	100
Chemical engineering	3,400	800	200	200	S	400	S
Civil and architectural engineering	8,400	2,000	500	S	S	1,500	S
Electrical, electronic, computer and communications engineering	19,700	6,900	1,300	300	S	5,200	S
Industrial engineering	4,000	1,000	400	S	S	500	S
Mechanical engineering	12,200	3,700	600	200	100	2,700	S
Other engineering	6,200	2,300	200	400	S	1,800	S

1/ Excludes those receiving a degree between April 15 and date of interview (May-November 1993)

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-38. Number of 1992 science and engineering bachelor's degree recipients who are employed, employed full time, employed part time, and number who have a second job, by field of degree: April 1993

Major field	Total recipients	Employed	Employed full time	Employed part time	Having a second job
All science and engineering fields	330,900	279,700	220,700	58,900	38,400
Major type					
Total science	273,100	227,100	175,800	51,200	35,100
Total engineering	57,700	52,600	44,900	7,700	3,300
Major field					
Computer and mathematical sciences, total	39,800	36,100	30,100	5,900	3,800
Computer science and information sciences	25,700	23,800	21,800	2,100	2,400
Mathematics and related sciences	14,100	12,200	8,400	3,900	1,400
Life and related sciences, total	52,100	38,600	27,100	11,500	7,000
Agricultural and food sciences	4,900	4,300	3,500	800	600
Biological sciences	43,300	31,100	21,100	10,000	5,900
Environmental life sciences including forestry sciences	3,900	3,200	2,500	700	500
Physical and related sciences, total	17,500	14,500	10,300	4,300	1,200
Chemistry, except biochemistry	8,600	7,100	5,400	1,700	400
Earth sciences, geology, and oceanography	3,800	3,500	2,600	900	200
Physics and astronomy	4,700	3,500	1,900	1,600	300
Other physical sciences	500	400	300	S	200
Social and related sciences, total	163,700	137,900	108,400	29,500	23,100
Economics	23,700	20,300	17,900	2,300	2,400
Political science and related sciences	41,800	33,700	26,700	7,000	6,600
Psychology	61,100	51,600	37,400	14,200	9,400
Sociology and anthropology	24,900	21,700	17,100	4,600	3,100
Other social sciences	12,200	10,700	9,200	1,400	1,700
Engineering, total	57,700	52,600	44,900	7,700	3,300
Aerospace and related engineering	3,800	3,300	2,700	600	200
Chemical engineering	3,400	3,100	2,900	200	S
Civil and architectural engineering	8,400	7,400	6,300	1,100	700
Electrical, electronic, computer and communications engineering	19,700	17,700	15,200	2,500	700
Industrial engineering	4,000	3,800	3,400	400	200
Mechanical engineering	12,200	11,600	10,000	1,600	1,100
Other engineering	6,200	5,600	4,300	1,300	400

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-39. Number of 1992 science and engineering bachelor's degree recipients who are employed, unemployed, and not in the labor force, by field of degree: April 1993

Major field	Total recipients	Employed	Unemployed 1/	Not in labor force
All science and engineering fields	330,900	279,700	17,700	33,500
Major type				
Total science	273,200	227,100	14,700	31,400
Total engineering	57,700	52,600	3,000	2,200
Major field				
Computer and mathematical sciences, total	39,800	36,100	2,200	1,500
Computer science and information sciences	25,700	23,800	1,500	400
Mathematics and related sciences	14,100	12,200	700	1,100
Life and related sciences, total	52,100	38,600	2,000	11,600
Agricultural and food sciences	4,900	4,300	300	400
Biological sciences	43,300	31,100	1,400	10,800
Environmental life sciences including forestry sciences	3,900	3,200	300	400
Physical and related sciences, total	17,500	14,500	700	2,300
Chemistry, except biochemistry	8,600	7,100	200	1,200
Earth sciences, geology, and oceanography	3,800	3,500	100	200
Physics and astronomy	4,700	3,500	300	800
Other physical sciences	500	400	S	S
Social and related sciences, total	163,700	137,900	9,800	16,000
Economics	23,700	20,300	1,900	1,500
Political science and related sciences	41,800	33,700	3,200	4,900
Psychology	61,100	51,600	3,100	6,400
Sociology and anthropology	24,900	21,700	1,000	2,200
Other social sciences	12,200	10,700	600	900
Engineering, total	57,700	52,600	3,000	2,200
Aerospace and related engineering	3,800	3,300	200	300
Chemical engineering	3,400	3,100	200	100
Civil and architectural engineering	8,400	7,400	600	400
Electrical, electronic, computer and communications engineering	19,700	17,700	1,300	700
Industrial engineering	4,000	3,800	100	S
Mechanical engineering	12,200	11,600	300	300
Other engineering	6,200	5,600	300	400

1/ The unemployed are those who were not working on April 15 and who were seeking work or who were on layoff from a job.

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-40. Number of 1992 science and engineering bachelor's degree recipients who are not full-time students, and number of non-full-time students who are not in the labor force, in the labor force, employed, and unemployed, by field of degree: April 1993

Major field	Not full-time students				
				In labor force	
	Total number	Not in labor force	In labor force	Employed	Unemployed 1/
All science and engineering fields	259,000	8,400	250,700	239,200	11,500
Major type					
Total science	210,600	7,900	202,700	193,300	9,400
Total engineering	48,400	500	48,000	45,900	2,100
Major field					
Computer and mathematical sciences, total	34,900	600	34,400	32,700	1,700
Computer science and information sciences	24,300	200	24,100	22,800	1,200
Mathematics and related sciences	10,600	300	10,300	9,800	500
Life and related sciences, total	33,700	1,900	31,800	30,500	1,300
Agricultural and food sciences	3,900	S	3,800	3,600	200
Biological sciences	26,600	1,700	24,900	24,100	800
Environmental life sciences including forestry sciences	3,200	100	3,100	2,900	200
Physical and related sciences, total	10,400	300	10,000	9,800	300
Chemistry, except biochemistry	4,900	S	4,800	4,700	S
Earth sciences, geology, and oceanography	2,700	S	2,700	2,600	S
Physics and astronomy	2,400	200	2,200	2,100	S
Other physical sciences	400	S	400	400	S
Social and related sciences, total	131,600	5,100	126,500	120,300	6,200
Economics	19,700	200	19,500	18,600	900
Political science and related sciences	33,800	1,600	32,200	30,300	1,800
Psychology	47,400	2,300	45,100	42,700	2,400
Sociology and anthropology	20,300	800	19,500	18,700	800
Other social sciences	10,300	200	10,200	10,000	200
Engineering, total	48,400	500	48,000	45,900	2,100
Aerospace and related engineering	3,000	S	2,900	2,800	100
Chemical engineering	3,000	S	2,900	2,800	100
Civil and architectural engineering	7,200	S	7,200	6,700	400
Electrical, electronic, computer and communications engineering	16,500	200	16,400	15,500	900
Industrial engineering	3,600	S	3,600	3,500	100
Mechanical engineering	10,400	100	10,200	10,100	200
Other engineering	4,800	S	4,700	4,500	200

1/ The unemployed are those who were not working on April 15 and who were seeking work or who were on layoff from a job.

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-41. Number of 1992 science and engineering bachelor's degree recipients who are not working, and reasons for not working, by field of degree: April 1993

Major field	Total recipients	Total not working	Reasons for not working: Student	Suitable job not available	Family responsibilities	On layoff	Not need/ want to work	Other
All science and engineering fields	330,900	51,200	31,600	8,900	3,300	1,900	3,200	6,200
Major type								
Total science	273,100	46,100	29,000	6,900	3,200	1,600	3,200	5,700
Total engineering	57,700	5,200	2,700	2,000	S	300	S	500
Major field								
Computer and mathematical sciences, total	39,800	3,700	1,700	1,100	400	500	100	400
Computer science and information sciences	25,700	1,900	600	700	200	400	S	200
Mathematics and related sciences	14,100	1,800	1,100	400	100	100	100	100
Life and related sciences, total	52,100	13,600	10,500	900	600	200	1,100	1,100
Agricultural and food sciences	4,900	700	300	S	S	S	S	100
Biological sciences	43,300	12,200	9,800	800	500	200	900	900
Environmental life sciences including forestry sciences	3,900	700	300	100	S	S	200	S
Physical and related sciences, total	17,500	3,000	2,400	200	S	200	100	200
Chemistry, except biochemistry	8,600	1,500	1,300	S	S	200	S	S
Earth sciences, geology, and oceanography	3,800	300	200	S	S	S	S	S
Physics and astronomy	4,700	1,100	900	100	S	S	100	100
Other physical sciences	500	S	S	S	S	S	S	S
Social and related sciences, total	163,700	25,800	14,400	4,600	2,300	600	1,800	4,000
Economics	23,700	3,500	2,200	700	100	100	200	500
Political science and related sciences	41,800	8,100	4,600	1,700	700	300	800	800
Psychology	61,100	9,500	5,100	1,900	900	200	500	1,800
Sociology and anthropology	24,900	3,200	1,500	300	400	S	300	600
Other social sciences	12,200	1,500	1,100	200	200	S	S	300
Engineering, total	57,700	5,200	2,700	2,000	S	300	S	500
Aerospace and related engineering	3,800	500	300	200	S	S	S	S
Chemical engineering	3,400	300	100	100	S	S	S	S
Civil and architectural engineering	8,400	1,000	500	400	S	100	S	S
Electrical, electronic, computer and communications engineering	19,700	2,000	800	1,100	S	S	S	400
Industrial engineering	4,000	200	S	S	S	S	S	S
Mechanical engineering	12,200	600	400	100	S	S	S	S
Other engineering	6,200	700	500	100	S	S	S	S

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Respondents may indicate more than one reason for not working. Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-42. Number of employed 1992 science and engineering bachelor's degree recipients, by occupation and field of degree: April 1993

Major field	Total employed	Occupation					
		Computer and mathematical scientists	Life and related scientists	Physical scientists	Social and related scientists	Engineers	Other fields 1/
All science and engineering fields	279,700	22,700	9,400	9,400	10,300	35,200	192,600
Major type							
Total science	227,100	17,300	9,400	9,000	10,100	2,400	178,900
Total engineering	52,600	5,400	S	400	200	32,800	13,700
Major field							
Computer and mathematical sciences, total	36,100	13,400	S	200	100	600	21,700
Computer science and information sciences	23,800	10,700	S	S	S	400	12,700
Mathematics and related sciences	12,200	2,700	S	200	100	200	8,900
Life and related sciences, total	38,600	300	8,400	1,000	200	400	28,200
Agricultural and food sciences	4,300	S	1,100	S	S	S	3,100
Biological sciences	31,100	200	6,900	400	200	400	22,900
Environmental life sciences including forestry sciences	3,200	S	400	600	S	S	2,100
Physical and related sciences, total	14,500	400	700	7,100	100	900	5,300
Chemistry, except biochemistry	7,100	S	600	4,200	S	100	2,300
Earth sciences, geology, and oceanography	3,500	100	S	1,800	S	200	1,300
Physics and astronomy	3,500	300	S	1,100	S	600	1,400
Other physical sciences	400	S	S	S	S	S	300
Social and related sciences, total	137,900	3,100	300	600	9,700	500	123,700
Economics	20,300	800	100	S	700	200	18,500
Political science and related sciences	33,700	600	S	200	1,700	S	31,200
Psychology	51,600	1,500	200	300	6,000	S	43,500
Sociology and anthropology	21,700	S	S	S	1,200	S	20,500
Other social sciences	10,700	200	S	200	200	300	9,900
Engineering, total	52,600	5,400	S	400	200	32,800	13,700
Aerospace and related engineering	3,300	200	S	S	S	1,300	1,800
Chemical engineering	3,100	S	S	S	S	2,500	500
Civil and architectural engineering	7,400	S	S	S	S	5,900	1,400
Electrical, electronic, computer and communications engineering	17,700	3,700	S	100	S	9,800	4,000
Industrial engineering	3,800	300	S	S	S	1,900	1,400
Mechanical engineering	11,600	700	S	S	S	8,100	2,800
Other engineering	5,600	400	S	200	S	3,200	1,800

1/ This broad category includes the following occupations: Managers and other related occupations; health and related occupations; educators other than S&E postsecondary; social services and related occupations; technicians, including computer programmers; sales and marketing occupations; and all other occupations.

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-43. Number of employed 1992 science and engineering bachelor's degree recipients who have a job for which license or certification is required or recommended, and number of these that have license or certificate, by sex and field of degree: April 1993

Major field	Total employed	Number for whom license or certificate required or recommended			Number for whom license or certificate required or recommended who have license or certificate		
		Total	Male	Female	Total	Male	Female
All science and engineering fields	279,700	82,200	46,700	35,600	34,400	20,900	13,600
Major type							
Total science	227,100	61,100	29,200	31,900	28,700	16,000	12,700
Total engineering	52,600	21,200	17,500	3,700	5,700	4,900	800
Major field							
Computer and mathematical sciences, total	36,100	8,100	4,200	3,900	4,200	2,200	2,000
Computer science and information sciences	23,800	3,700	2,400	1,300	1,100	1,000	100
Mathematics and related sciences	12,200	4,400	1,800	2,500	3,100	1,200	1,900
Life and related sciences, total	38,600	10,400	4,700	5,700	5,800	2,600	3,200
Agricultural and food sciences	4,300	1,300	900	500	700	500	100
Biological sciences	31,100	8,400	3,300	5,100	4,900	1,800	3,000
Environmental life sciences including forestry sciences	3,200	700	500	200	200	200	S
Physical and related sciences, total	14,500	3,200	2,400	800	1,400	1,200	300
Chemistry, except biochemistry	7,100	1,100	800	300	600	500	S
Earth sciences, geology, and oceanography	3,500	1,200	800	400	500	300	200
Physics and astronomy	3,500	600	500	S	200	200	S
Other physical sciences	400	300	300	S	200	200	S
Social and related sciences, total	137,900	39,400	17,900	21,600	17,300	10,100	7,300
Economics	20,300	5,200	3,900	1,300	2,300	2,000	300
Political science and related sciences	33,700	8,400	6,000	2,400	4,100	3,400	700
Psychology	51,600	16,500	4,700	11,800	5,700	2,500	3,200
Sociology and anthropology	21,700	5,300	700	4,600	2,200	200	2,100
Other social sciences	10,700	4,100	2,600	1,500	2,900	2,000	900
Engineering, total	52,600	21,200	17,500	3,700	5,700	4,900	800
Aerospace and related engineering	3,300	1,300	1,200	200	500	500	S
Chemical engineering	3,100	1,100	700	400	100	S	S
Civil and architectural engineering	7,400	5,900	4,800	1,100	1,800	1,400	400
Electrical, electronic, computer and communications engineering	17,700	4,400	3,400	1,000	900	600	300
Industrial engineering	3,800	1,200	900	300	200	200	S
Mechanical engineering	11,600	4,700	4,400	300	1,300	1,300	S
Other engineering	5,600	2,500	2,100	400	800	700	S

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-44. Number of 1992 science and engineering bachelor's degree recipients who have had a career path job since being awarded most recent degree, and number not having career path job who are seeking one, by sex and field of degree: April 1993

Major field	Total recipients	Number having a career path job			Number not having career path job	Number of those not having a career path job who are seeking a career path job		
		Total	Male	Female		Total	Male	Female
All science and engineering fields	330,900	150,400	89,500	60,800	180,500	87,900	48,200	39,800
Major type								
Total science	273,200	115,900	60,200	55,700	157,200	72,600	34,100	38,400
Total engineering	57,700	34,400	29,300	5,100	23,300	15,400	14,000	1,300
Major field								
Computer and mathematical sciences, total	39,800	22,600	13,800	8,900	17,100	10,300	5,700	4,500
Computer science and information sciences	25,700	16,800	11,100	5,700	9,000	6,800	4,100	2,700
Mathematics and related sciences	14,100	5,900	2,700	3,200	8,200	3,500	1,700	1,800
Life and related sciences, total	52,100	19,200	9,900	9,200	33,000	12,800	6,200	6,600
Agricultural and food sciences	4,900	2,700	1,800	800	2,300	1,200	600	600
Biological sciences	43,300	15,200	7,200	8,000	28,100	10,300	4,900	5,400
Environmental life sciences including forestry sciences	3,900	1,300	900	400	2,600	1,300	800	600
Physical and related sciences, total	17,500	7,900	5,000	2,800	9,700	3,100	2,100	1,000
Chemistry, except biochemistry	8,600	3,900	2,300	1,600	4,700	1,200	700	500
Earth sciences, geology, and oceanography	3,800	2,100	1,300	800	1,600	900	500	300
Physics and astronomy	4,700	1,500	1,200	400	3,100	1,000	900	200
Other physical sciences	500	300	300	S	200	S	S	S
Social and related sciences, total	163,700	66,300	31,500	34,800	97,400	46,300	20,100	26,300
Economics	23,700	11,700	8,500	3,200	12,000	5,400	3,800	1,600
Political science and related sciences	41,800	14,600	9,700	4,900	27,200	14,400	7,400	7,000
Psychology	61,100	23,900	7,200	16,700	37,200	16,700	4,500	12,100
Sociology and anthropology	24,900	9,100	2,800	6,300	15,700	6,600	2,600	4,000
Other social sciences	12,200	6,900	3,200	3,700	5,300	3,300	1,800	1,500
Engineering, total	57,700	34,400	29,300	5,100	23,300	15,400	14,000	1,300
Aerospace and related engineering	3,800	1,700	1,600	S	2,100	1,400	1,300	S
Chemical engineering	3,400	2,400	1,400	1,000	1,000	600	500	200
Civil and architectural engineering	8,400	5,400	4,400	1,000	3,000	1,900	1,500	300
Electrical, electronic, computer and communications engineering	19,700	11,900	10,400	1,600	7,700	5,500	5,500	S
Industrial engineering	4,000	2,500	1,800	600	1,500	1,200	900	300
Mechanical engineering	12,200	7,000	6,400	600	5,200	3,500	3,200	300
Other engineering	6,200	3,500	3,300	200	2,700	1,400	1,100	200

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-45. Number of employed 1992 science and engineering bachelor's degree recipients having job closely, somewhat, and not related to degree, by field of degree: April 1993

Major field	Total employed	Relationship of degree to job		
		Closely related	Somewhat related	Not related
All science and engineering fields	279,700	112,000	80,300	87,500
Major type				
Total science	227,100	85,500	61,700	79,900
Total engineering	52,600	26,300	18,600	7,700
Major field				
Computer and mathematical sciences, total	36,100	20,400	9,500	6,200
Computer science and information sciences	23,800	14,700	5,700	3,500
Mathematics and related sciences	12,200	5,800	3,700	2,700
Life and related sciences, total	38,600	18,900	7,900	11,800
Agricultural and food sciences	4,300	2,400	1,100	700
Biological sciences	31,100	15,500	5,800	9,800
Environmental life sciences including forestry sciences	3,200	1,000	1,000	1,200
Physical and related sciences, total	14,500	9,100	2,900	2,600
Chemistry, except biochemistry	7,100	4,800	1,400	900
Earth sciences, geology, and oceanography	3,500	2,000	600	800
Physics and astronomy	3,500	1,900	800	900
Other physical sciences	400	300	S	S
Social and related sciences, total	137,900	37,100	41,500	59,300
Economics	20,300	3,800	8,400	8,000
Political science and related sciences	33,700	6,900	8,400	18,300
Psychology	51,600	18,000	14,200	19,400
Sociology and anthropology	21,700	5,000	7,700	9,000
Other social sciences	10,700	3,400	2,700	4,600
Engineering, total	52,600	26,300	18,600	7,700
Aerospace and related engineering	3,300	900	1,300	1,100
Chemical engineering	3,100	1,600	1,200	300
Civil and architectural engineering	7,400	5,000	2,000	400
Electrical, electronic, computer and communications engineering	17,700	8,900	6,700	2,100
Industrial engineering	3,800	1,300	1,700	800
Mechanical engineering	11,600	5,500	4,000	2,000
Other engineering	5,600	3,000	1,700	900

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-46. Number of employed 1992 science and engineering bachelor's degree recipients, by sex, race/ethnicity, and occupation: April 1993

Occupation	Total employed	Sex		Race/ethnicity				
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native
All employed science and engineering graduates	279,700	156,600	123,000	227,800	20,900	10,600	19,300	900
Occupation type								
Total scientists	51,800	31,100	20,700	40,500	4,200	2,300	4,700	100
Total engineers	35,200	29,600	5,600	29,000	1,100	1,900	3,000	100
Total other occupations	192,600	95,800	96,800	158,400	15,600	6,400	11,600	600
Occupation								
Computer and mathematical scientists	22,700	15,100	7,600	15,900	2,400	900	3,400	100
Life and related scientists	9,400	5,800	3,600	8,000	700	700	100	S
Physical scientists	9,400	6,500	2,900	8,000	400	200	700	S
Social and related scientists	10,300	3,700	6,600	8,600	700	500	500	S
Engineers	35,200	29,600	5,600	29,000	1,100	1,900	3,000	100
Managers and related occupations	25,100	16,100	9,000	21,100	1,300	400	2,200	S
Health and related occupations	8,000	2,600	5,300	6,000	800	400	700	S
Educators other than S&E postsecondary	19,400	7,800	11,500	15,500	2,200	900	800	S
Social services and related occupations	15,400	3,800	11,600	11,300	2,700	900	500	S
Technicians including computer programmers	19,800	12,400	7,400	16,700	900	400	1,800	S
Sales and marketing occupations	30,100	16,400	13,700	25,700	1,600	1,000	1,800	S
Other occupations	74,900	36,600	38,200	62,100	6,000	2,400	3,900	500

KEY: S = Data values below 100 are suppressed for reasons of confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-47. Number of employed 1992 science and engineering bachelor's degree recipients, by age and occupation: April 1993

Occupation	Total employed	Age				
		Less than 25	25-29	30-34	35-39	40 or more
All employed science and engineering graduates	279,700	193,000	50,500	17,200	9,000	10,000
Occupation type						
Total scientists	51,800	35,700	8,400	3,000	2,800	1,900
Total engineers	35,200	23,100	6,700	3,600	1,000	800
Total other occupations	192,600	134,100	35,400	10,600	5,200	7,400
Occupation						
Computer and mathematical scientists	22,700	13,600	4,300	1,800	1,600	1,400
Life and related scientists	9,400	7,000	1,800	400	200	S
Physical scientists	9,400	6,800	1,400	500	200	400
Social and related scientists	10,300	8,300	900	300	800	S
Engineers	35,200	23,100	6,700	3,600	1,000	800
Managers and related occupations	25,100	15,300	6,200	1,600	300	1,800
Health and related occupations	8,000	5,800	1,000	300	200	600
Educators other than S&E postsecondary	19,400	13,600	2,200	1,400	900	1,300
Social services and related occupations	15,400	10,800	2,700	1,200	200	500
Technicians including computer programmers	19,800	12,300	4,300	1,700	900	500
Sales and marketing occupations	30,100	23,400	5,000	900	500	400
Other occupations	74,900	53,000	13,900	3,600	2,200	2,200

KEY: S = Data values below 100 are suppressed for reasons of confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-48. Number of employed 1992 science and engineering bachelor's degree recipients, by sector of employment and occupation: April 1993

Occupation	Total employed	Sector of employment						
		Private, for profit company	Self-employed	4-year college and university	Other educational	Nonprofit organizations	Federal government	State or local government
All employed science and engineering graduates	279,700	168,900	5,200	37,000	19,400	18,900	12,100	18,100
Occupation type								
Total scientists	51,800	24,400	400	17,500	800	3,300	1,900	3,500
Total engineers	35,200	23,700	S	5,100	S	600	3,200	2,500
Total other occupations	192,600	120,800	4,800	14,500	18,600	15,000	7,000	12,100
Occupation								
Computer and mathematical scientists	22,700	16,300	200	4,300	400	500	400	600
Life and related scientists	9,400	2,400	100	4,700	200	600	600	700
Physical scientists	9,400	4,100	S	3,900	100	200	600	500
Social and related scientists	10,300	1,600	S	4,500	200	2,000	300	1,700
Engineers	35,200	23,700	S	5,100	S	600	3,200	2,500
Managers and related occupations	25,100	18,800	800	1,200	300	1,500	1,800	700
Health and related occupations	8,000	4,700	200	1,200	S	1,200	200	600
Educators other than S&E postsecondary	19,400	800	200	1,900	15,400	700	S	300
Social services and related occupations	15,400	1,800	300	600	2,000	5,700	300	4,700
Technicians including computer programmers	19,800	14,300	400	3,700	100	600	600	100
Sales and marketing occupations	30,100	28,700	700	300	100	200	S	200
Other occupations	74,900	51,800	2,200	5,600	700	5,100	4,000	5,500

KEY: S = Data values below 100 are suppressed for reasons of confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-49. Number of employed 1992 science and engineering bachelor's degree recipients, by sector of employment and field of degree: April 1993

Major field	Total employed	Sector of employment						
		Private, for profit company	Self-employed	4-year college and university	Other educational	Nonprofit organizations	Federal government	State or local government
All science and engineering fields	279,700	168,900	5,200	37,000	19,400	18,900	12,100	18,100
Major type								
Total science	227,100	131,600	4,500	30,800	19,000	17,900	8,000	15,200
Total engineering	52,600	37,400	700	6,200	400	1,000	4,000	2,900
Major field								
Computer and mathematical sciences, total	36,100	24,900	300	3,900	4,100	600	1,500	800
Computer science and information sciences	23,800	19,400	100	1,400	900	500	1,100	500
Mathematics and related sciences	12,200	5,500	200	2,500	3,200	100	400	300
Life and related sciences, total	38,600	20,100	600	9,000	2,900	2,900	1,700	1,400
Agricultural and food sciences	4,300	2,800	100	700	200	S	200	100
Biological sciences	31,100	15,400	400	7,800	2,500	2,500	1,300	1,000
Environmental life sciences including forestry sciences	3,200	1,900	S	400	200	300	100	300
Physical and related sciences, total	14,500	7,000	200	5,200	800	200	900	300
Chemistry, except biochemistry	7,100	3,800	S	2,700	300	S	S	200
Earth sciences, geology, and oceanography	3,500	1,700	S	900	100	S	600	S
Physics and astronomy	3,500	1,400	S	1,500	200	S	200	S
Other physical sciences	400	S	S	S	200	S	S	S
Social and related sciences, total	137,900	79,600	3,400	12,800	11,100	14,200	4,000	12,700
Economics	20,300	15,600	500	1,100	500	1,100	1,000	400
Political science and related sciences	33,700	21,400	1,200	2,500	2,000	2,200	1,500	2,900
Psychology	51,600	25,100	1,000	6,200	5,100	7,500	1,200	5,500
Sociology and anthropology	21,700	11,600	500	2,000	2,100	2,800	100	2,500
Other social sciences	10,700	5,900	200	900	1,500	600	200	1,400
Engineering, total	52,600	37,400	700	6,200	400	1,000	4,000	2,900
Aerospace and related engineering	3,300	2,000	100	400	S	S	600	S
Chemical engineering	3,100	2,400	S	300	S	100	S	S
Civil and architectural engineering	7,400	4,600	S	600	S	100	400	1,600
Electrical, electronic, computer and communications engineering	17,700	13,000	200	2,000	S	400	1,400	600
Industrial engineering	3,800	3,100	S	300	S	S	200	S
Mechanical engineering	11,600	8,500	300	1,500	S	200	1,000	S
Other engineering	5,600	3,600	S	1,100	100	S	300	400

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-50. Number of employed 1992 science and engineering bachelor's degree recipients, by primary work activity and field of degree: April 1993

Major field	Total employed	Primary work activity				
		Research and development (R&D)	Computer applications	Management, sales, administration	Teaching	Other
All science and engineering fields	279,700	53,800	44,300	88,500	34,700	58,300
Major type						
Total science	227,100	34,000	32,700	76,300	32,800	51,400
Total engineering	52,600	19,800	11,600	12,300	2,000	6,900
Major field						
Computer and mathematical sciences, total	36,100	3,000	16,500	6,600	6,400	3,600
Computer science and information sciences	23,800	2,100	14,200	4,300	1,200	2,000
Mathematics and related sciences	12,200	900	2,400	2,200	5,100	1,600
Life and related sciences, total	38,600	11,400	2,300	9,000	5,600	10,200
Agricultural and food sciences	4,300	1,300	100	1,600	200	1,000
Biological sciences	31,100	9,300	1,900	6,300	4,900	8,700
Environmental life sciences including forestry sciences	3,200	900	300	1,100	400	600
Physical and related sciences, total	14,500	5,900	800	2,800	3,000	2,000
Chemistry, except biochemistry	7,100	3,200	200	1,300	1,500	900
Earth sciences, geology, and oceanography	3,500	1,300	300	800	500	600
Physics and astronomy	3,500	1,300	300	700	800	500
Other physical sciences	400	S	S	S	200	S
Social and related sciences, total	137,900	13,600	13,000	57,800	17,800	35,600
Economics	20,300	1,700	2,000	12,100	600	3,900
Political science and related sciences	33,700	3,400	3,000	16,500	3,100	7,800
Psychology	51,600	5,400	5,400	16,600	9,400	14,800
Sociology and anthropology	21,700	2,600	1,200	8,900	2,700	6,200
Other social sciences	10,700	600	1,400	3,800	2,000	2,900
Engineering, total	52,600	19,800	11,600	12,300	2,000	6,900
Aerospace and related engineering	3,300	800	600	1,000	300	700
Chemical engineering	3,100	1,700	300	500	S	500
Civil and architectural engineering	7,400	2,600	2,000	2,000	200	600
Electrical, electronic, computer and communications engineering	17,700	6,500	5,900	2,800	500	2,000
Industrial engineering	3,800	700	700	1,600	100	700
Mechanical engineering	11,600	5,600	1,300	2,800	400	1,500
Other engineering	5,600	1,900	900	1,600	400	800

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Primary work activity is defined as activity in which respondent worked most hours on job in typical work week. Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-51. Number of employed 1992 science and engineering bachelor's degree recipients, by primary work activity and occupation: April 1993

Occupation	Total employed	Primary work activity				
		Research and development (R&D)	Computer applications	Management, sales, administration	Teaching	Other
All employed science and engineering graduates	279,700	53,800	44,300	88,500	34,700	58,300
Occupation type						
Total scientists	51,800	18,500	15,400	4,400	8,600	4,800
Total engineers	35,200	18,000	6,500	6,400	1,200	3,000
Total other occupations	192,600	17,200	22,400	77,700	24,900	50,400
Occupation						
Computer and mathematical scientists	22,700	2,800	13,900	2,000	3,000	1,000
Life and related scientists	9,400	5,600	400	600	1,500	1,300
Physical scientists	9,400	4,700	500	900	2,300	900
Social and related scientists	10,300	5,400	500	900	1,800	1,600
Engineers	35,200	18,000	6,500	6,400	1,200	3,000
Managers and related occupations	25,100	1,400	2,200	18,800	200	2,500
Health and related occupations	8,000	900	700	800	200	5,500
Educators other than S&E postsecondary	19,400	600	S	600	17,700	400
Social services and related occupations	15,400	500	400	3,400	3,300	7,800
Technicians including computer programmers	19,800	7,500	9,000	1,700	200	1,500
Sales and marketing occupations	30,100	900	1,500	25,100	100	2,500
Other occupations	74,900	5,500	8,600	27,300	3,300	30,200

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Primary work activity is defined as activity in which respondent worked most hours on job in typical work week. Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-52. Number of employed 1992 science and engineering bachelor's degree recipients whose work is supported by federal government, and agency giving support, by field of degree: April 1993

Major field	Total employed	Number whose work is supported by federal government	Agency supporting work							
			Department of Defense	Department of Education	Department of Energy	EPA	NASA	NIH	NSF	Other
All science and engineering fields	279,700	35,600	9,400	2,900	2,100	2,100	2,200	6,300	2,900	5,000
Major type										
Total science	227,100	26,400	4,600	2,700	1,100	1,600	1,200	6,200	2,400	4,500
Total engineering	52,600	9,200	4,700	200	1,100	500	1,000	100	500	500
Major field										
Computer and mathematical sciences, total	36,100	3,400	1,800	300	100	100	500	200	500	100
Computer science and information sciences	23,800	2,200	1,500	100	100	S	500	100	S	100
Mathematics and related sciences	12,200	1,200	400	100	S	100	S	S	500	S
Life and related sciences, total	38,600	7,800	700	400	300	300	200	3,800	800	1,100
Agricultural and food sciences	4,300	400	S	S	S	S	S	S	S	S
Biological sciences	31,100	7,000	600	300	300	200	200	3,700	800	1,000
Environmental life sciences including forestry sciences	3,200	400	100	S	S	200	S	S	S	S
Physical and related sciences, total	14,500	2,800	500	200	500	400	300	700	800	100
Chemistry, except biochemistry	7,100	1,700	300	200	300	300	S	600	400	S
Earth sciences, geology, and oceanography	3,500	500	S	S	100	S	S	S	100	S
Physics and astronomy	3,500	700	200	S	S	S	200	S	200	S
Other physical sciences	400	S	S	S	S	S	S	S	S	S
Social and related sciences, total	137,900	12,400	1,600	1,800	200	700	200	1,500	300	3,100
Economics	20,300	800	100	S	S	S	S	S	S	300
Political science and related sciences	33,700	2,100	500	S	200	200	S	200	S	800
Psychology	51,600	6,200	800	800	S	500	200	1,400	S	1,300
Sociology and anthropology	21,700	2,500	S	800	S	S	S	S	200	600
Other social sciences	10,700	800	200	200	S	S	S	S	200	200
Engineering, total	52,600	9,200	4,700	200	1,100	500	1,000	100	500	500
Aerospace and related engineering	3,300	600	300	S	S	S	200	S	S	S
Chemical engineering	3,100	400	S	S	200	S	S	S	S	S
Civil and architectural engineering	7,400	1,700	400	S	S	100	S	S	S	200
Electrical, electronic, computer and communications engineering	17,700	3,200	2,200	S	400	S	500	S	200	S
Industrial engineering	3,800	300	200	S	S	S	S	S	S	S
Mechanical engineering	11,600	2,100	1,300	S	300	100	100	S	S	100
Other engineering	5,600	900	400	S	S	S	200	S	S	S

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Respondent's work may be supported by more than one federal agency. Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-53. Median salary of full-time employed 1992 bachelor's degree recipients, by sex, race/ethnicity, and field of degree: April 1993

Major field	Total	Sex		Race/ethnicity				
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native
All science and engineering fields	$23,000	$25,000	$20,000	$23,000	$21,000	$23,500	$25,000	S
Major type								
Total science	21,000	23,000	20,000	20,800	20,000	21,700	24,000	S
Total engineering	32,000	32,000	32,800	32,000	32,000	32,000	34,000	S
Major field								
Computer and mathematical sciences, total	26,500	29,000	25,000	26,400	25,500	S	28,500	S
Computer science and information sciences	30,000	30,300	28,000	30,000	29,000	S	31,200	S
Mathematics and related sciences	21,500	21,600	21,000	21,500	S	S	S	S
Life and related sciences, total	19,500	20,300	19,200	19,700	S	S	S	S
Agricultural and food sciences	21,000	21,000	21,600	21,000	S	S	S	S
Biological sciences	19,500	20,200	19,000	19,500	S	S	S	S
Environmental life sciences including forestry sciences	18,200	18,200	18,000	18,000	S	S	S	S
Physical and related sciences, total	25,000	25,000	25,000	25,000	S	S	S	S
Chemistry, except biochemistry	27,000	27,000	27,000	27,200	S	S	S	S
Earth sciences, geology, and oceanography	21,900	21,900	22,900	21,900	S	S	S	S
Physics and astronomy	25,000	25,000	S	25,000	S	S	S	S
Other physical sciences	S	S	S	S	S	S	S	S
Social and related sciences, total	20,000	21,600	19,000	20,000	20,000	20,000	22,000	S
Economics	23,500	25,000	22,000	23,000	S	S	S	S
Political science and related sciences	20,800	22,000	18,000	20,000	S	S	S	S
Psychology	18,000	19,500	18,000	18,000	18,700	S	S	S
Sociology and anthropology	20,400	19,000	20,800	20,000	S	S	S	S
Other social sciences	22,000	21,600	22,100	22,000	S	S	S	S
Engineering, total	32,000	32,000	32,800	32,000	32,000	32,000	34,000	S
Aerospace and related engineering	27,000	27,600	S	25,000	S	S	S	S
Chemical engineering	38,600	38,000	40,000	38,400	S	S	S	S
Civil and architectural engineering	30,000	30,000	30,000	30,000	S	S	S	S
Electrical, electronic, computer and communications engineering	34,000	33,600	S	33,600	S	S	35,000	S
Industrial engineering	32,000	32,000	32,000	33,000	S	S	S	S
Mechanical engineering	32,000	32,000	S	32,000	S	S	S	S
Other engineering	33,000	33,500	32,000	33,500	S	S	31,200	S

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. Unweighted cell size is less than 20.

NOTE: Salary for self-employed persons and for full-time students is not included in data presented in table.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993.

Table B-54. Median salary of full-time employed 1992 bachelor's degree recipients, by sex, race/ethnicity, and occupation: April 1993

Occupation	Total	Sex		Race/ethnicity				
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native
All employed science and engineering graduates	$23,000	$25,000	$20,000	$23,000	$21,000	$23,500	$25,000	S
Occupation type								
Total scientists	26,000	28,600	25,000	25,200	27,500	S	28,000	S
Total engineers	33,500	33,500	33,600	33,000	36,400	32,000	35,000	S
Total other occupations	20,400	22,000	19,200	20,200	19,000	20,000	23,000	S
Occupation								
Computer and mathematical scientists	31,000	31,200	30,000	30,000	S	S	31,500	S
Life and related scientists	22,000	23,000	21,000	23,000	S	S	S	S
Physical scientists	25,000	25,000	27,000	25,000	S	S	S	S
Social and related scientists	19,200	20,000	18,000	19,200	S	S	S	S
Engineers	33,500	33,500	33,600	33,000	36,400	32,000	35,000	S
Managers and related occupations	25,000	28,000	22,800	25,000	S	S	25,000	S
Health and related occupations 1/	17,700	19,200	15,500	18,000	S	S	S	S
Educators other than S&E postsecondary	20,000	22,000	19,500	20,000	S	S	S	S
Social services and related occupations	18,000	18,000	18,000	18,000	S	S	S	S
Technicians including computer programmers	25,200	25,500	22,900	25,000	S	S	S	S
Sales and marketing occupations	22,500	22,700	22,000	22,500	S	S	S	S
Other occupations	18,000	18,700	17,700	18,000	16,900	19,200	19,800	S

1/ Health-related majors are not included in sample. Salaries are not representative of those received by health-related occupations.

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. Unweighted cell size is less than 20.

NOTE: Salary for self-employed persons and for full-time students is not included in data presented in table.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-55. Median salary of full-time employed 1992 bachelor's degree recipients, by sector of employment and field of degree: April 1993

Major field	Total	Sector of employment		
		Private industry and business 1/	Educational institution	Government
All science and engineering fields	$23,000	$24,000	$19,800	$23,900
Major type				
Total science	21,000	21,000	19,500	22,500
Total engineering	32,000	S	26,000	30,000
Major field				
Computer and mathematical sciences, total	26,500	29,600	21,000	24,100
Computer science and information sciences	30,000	30,000	S	S
Mathematics and related sciences	21,500	21,600	21,000	S
Life and related sciences, total	19,500	19,200	20,000	22,700
Agricultural and food sciences	21,000	21,000	S	S
Biological sciences	19,500	19,200	20,000	22,700
Environmental life sciences including forestry sciences	18,200	18,200	S	S
Physical and related sciences, total	25,000	26,500	22,000	20,400
Chemistry, except biochemistry	27,000	28,000	S	S
Earth sciences, geology, and oceanography	21,900	22,900	S	18,800
Physics and astronomy	25,000	25,000	S	S
Other physical sciences	S	S	S	S
Social and related sciences, total	20,000	20,000	17,500	22,400
Economics	23,500	23,000	S	S
Political science and related sciences	20,800	19,200	S	23,800
Psychology	18,000	18,000	16,600	20,000
Sociology and anthropology	20,400	20,000	S	S
Other social sciences	22,000	21,000	S	S
Engineering, total	32,000	32,800	S	30,000
Aerospace and related engineering	27,000	30,000	S	23,000
Chemical engineering	38,600	39,000	S	S
Civil and architectural engineering	30,000	30,000	S	30,200
Electrical, electronic, computer and communications engineering	34,000	34,000	S	34,000
Industrial engineering	32,000	32,000	S	S
Mechanical engineering	32,000	32,000	S	34,000
Other engineering	33,000	33,600	S	S

1/ Nonprofit included with private industry and business

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. Unweighted cell size is less than 20.

NOTE: Salary for self-employed persons and for full-time students is not included in data presented in table.
Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993.

Table B-56. Mean salary of full-time employed 1992 bachelor's degree recipients, by broad sector of employment and occupation: April 1993

Occupation	Total	Broad sector of employment		
		Private industry and business 1/	Educational institution	Government
All employed science and engineering graduates	$23,000	24,000	19,800	23,900
Occupation type				
Total scientists	26,000	28,000	20,000	23,000
Total engineers	33,500	34,000	S	31,500
Total other occupations	20,400	20,100	19,500	22,200
Occupation				
Computer and mathematical scientists	31,000	31,000	S	S
Life and related scientists	22,000	24,800	18,000	S
Physical scientists	25,000	26,000	S	24,000
Social and related scientists	19,200	19,000	S	S
Engineers	33,500	34,000	S	31,500
Managers and related occupations	25,000	25,000	S	28,000
Health and related occupations 2/	17,700	17,700	S	S
Educators other than S&E postsecondary	20,000	S	20,000	S
Social services and related occupations	18,000	18,000	S	20,800
Technicians including computer programmers	25,200	27,000	20,000	S
Sales and marketing occupations	22,500	22,500	S	S
Other occupations	18,000	17,700	S	22,800

1/ Nonprofit included with private industry and business

2/ Health-related majors are not included in sample. Salaries are not representative of those received by health-related occupations.

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. Unweighted cell size is less than 20.

NOTE: Salary for self-employed persons and for full-time students is not included in data presented in table.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-57. Number of 1991 science and engineering master's degree recipients by sex, race/ethnicity, and field of degree: April 1993

Major field	Total recipients	Sex		Race/ethnicity				
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native
All science and engineering fields	57,000	38,700	18,300	41,200	2,500	2,000	11,100	200
Major type								
Total science	36,900	21,600	15,300	28,100	1,800	1,300	5,500	200
Total engineering	20,100	17,200	3,000	13,100	700	700	5,600	S
Major field								
Computer and mathematical sciences, total	13,000	8,800	4,200	9,100	900	300	2,800	S
Computer science and information sciences	8,700	6,400	2,300	5,800	700	100	2,000	S
Mathematics and related sciences	4,300	2,400	1,900	3,300	200	100	700	S
Life and related sciences, total	6,900	3,500	3,400	5,600	200	300	800	S
Agricultural and food sciences	1,100	800	400	800	S	S	100	S
Biological sciences	5,300	2,500	2,800	4,300	200	200	600	S
Environmental life sciences including forestry sciences	500	200	300	500	S	S	S	S
Physical and related sciences, total	5,200	3,800	1,500	3,900	100	200	1,000	S
Chemistry, except biochemistry	1,500	900	600	1,000	S	S	400	S
Earth sciences, geology, and oceanography	1,900	1,400	500	1,800	S	S	S	S
Physics and astronomy	1,600	1,300	300	1,100	S	S	400	S
Other physical sciences	100	S	S	S	S	S	S	S
Social and related sciences, total	11,800	5,500	6,300	9,500	500	600	1,000	100
Economics	1,700	1,200	500	1,200	S	200	200	S
Political science and related sciences	1,500	1,100	400	1,100	200	S	100	S
Psychology	5,100	1,700	3,400	4,300	200	200	300	S
Sociology and anthropology	1,700	600	1,100	1,400	S	S	200	S
Other social sciences	1,900	900	900	1,600	S	S	200	S
Engineering, total	20,100	17,200	3,000	13,100	700	700	5,600	S
Aerospace and related engineering	1,000	900	S	900	S	S	S	S
Chemical engineering	700	600	100	500	S	S	200	S
Civil and architectural engineering	2,600	1,900	600	1,600	S	100	800	S
Electrical, electronic, computer and communications engineering	8,100	7,100	1,000	4,700	300	300	2,700	S
Industrial engineering	1,200	1,000	300	800	S	S	300	S
Mechanical engineering	3,100	2,800	300	2,000	100	S	900	S
Other engineering	3,500	2,900	600	2,600	100	S	600	S

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-58. Number of 1991 science and engineering master's degree recipients, by race/ethnicity, sex, and field of degree: April 1993

Major field	Race/ethnicity									
	White, non-Hispanic		Black, non-Hispanic		Hispanic		Asian or Pacific Islander		American Indian/ Alaskan Native	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
All science and engineering fields	27,600	13,600	1,700	800	1,400	600	8,000	3,100	S	100
Major type										
Total science	16,500	11,600	1,100	700	700	600	3,100	2,300	S	S
Total engineering	11,100	2,000	600	S	600	S	4,800	800	S	S
Major field										
Computer and mathematical sciences, total	6,300	2,800	600	300	200	S	1,700	1,000	S	S
Computer science and information sciences	4,500	1,300	500	200	S	S	1,300	700	S	S
Mathematics and related sciences	1,800	1,500	100	S	S	S	400	300	S	S
Life and related sciences, total	2,900	2,700	100	100	100	200	300	400	S	S
Agricultural and food sciences	500	300	S	S	S	S	S	S	S	S
Biological sciences	2,200	2,100	S	100	S	100	200	400	S	S
Environmental life sciences including forestry sciences	200	300	S	S	S	S	S	S	S	S
Physical and related sciences, total	2,900	1,000	S	S	100	S	600	400	S	S
Chemistry, except biochemistry	700	300	S	S	S	S	200	200	S	S
Earth sciences, geology, and oceanography	1,300	500	S	S	S	S	S	S	S	S
Physics and astronomy	900	200	S	S	S	S	300	S	S	S
Other physical sciences	S	S	S	S	S	S	S	S	S	S
Social and related sciences, total	4,400	5,200	300	300	300	300	500	500	S	S
Economics	900	300	S	S	100	S	S	100	S	S
Political science and related sciences	800	300	200	S	S	S	S	S	S	S
Psychology	1,500	2,800	S	200	S	200	100	200	S	S
Sociology and anthropology	400	900	S	S	S	S	S	S	S	S
Other social sciences	700	900	S	S	S	S	100	S	S	S
Engineering, total	11,100	2,000	600	S	600	S	4,800	800	S	S
Aerospace and related engineering	800	S	S	S	S	S	S	S	S	S
Chemical engineering	300	100	S	S	S	S	200	S	S	S
Civil and architectural engineering	1,200	400	S	S	100	S	600	100	S	S
Electrical, electronic, computer and communications engineering	4,200	600	300	S	300	S	2,300	400	S	S
Industrial engineering	600	200	S	S	S	S	300	S	S	S
Mechanical engineering	1,900	200	100	S	S	S	800	S	S	S
Other engineering	2,100	500	100	S	S	S	500	100	S	S

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.
NOTE: Details may not add to totals because of rounding.
SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-59. Number of 1991 science and engineering master's degree recipients, by age and field of degree: April 1993

Major field	Total recipients	Age				
		Less than 25	25-29	30-34	35-39	40 or more
All science and engineering fields	57,000	900	26,900	16,600	7,400	5,200
Major type						
Total science	36,900	600	16,100	10,700	5,200	4,200
Total engineering	20,100	300	10,700	5,900	2,200	1,100
Major field						
Computer and mathematical sciences, total	13,000	200	5,400	3,800	1,900	1,700
Computer science and information sciences	8,700	100	3,600	2,500	1,200	1,200
Mathematics and related sciences	4,300	S	1,800	1,300	600	600
Life and related sciences, total	6,900	S	3,100	2,400	900	400
Agricultural and food sciences	1,100	S	500	400	200	100
Biological sciences	5,300	S	2,500	1,900	700	200
Environmental life sciences including forestry sciences	500	S	100	200	S	S
Physical and related sciences, total	5,200	S	2,800	1,600	500	300
Chemistry, except biochemistry	1,500	S	700	500	200	S
Earth sciences, geology, and oceanography	1,900	S	900	600	200	100
Physics and astronomy	1,600	S	1,100	300	100	S
Other physical sciences	100	S	S	S	S	S
Social and related sciences, total	11,800	300	4,900	3,000	1,900	1,800
Economics	1,700	S	800	600	100	S
Political science and related sciences	1,500	S	700	400	200	200
Psychology	5,100	100	2,200	1,000	1,000	800
Sociology and anthropology	1,700	S	800	500	200	300
Other social sciences	1,900	S	400	600	400	400
Engineering, total	20,100	300	10,700	5,900	2,200	1,100
Aerospace and related engineering	1,000	S	600	300	S	S
Chemical engineering	700	S	500	200	S	S
Civil and architectural engineering	2,600	S	1,200	900	300	S
Electrical, electronic, computer and communications engineering	8,100	S	4,300	2,200	900	600
Industrial engineering	1,200	S	600	400	S	100
Mechanical engineering	3,100	S	2,000	700	300	S
Other engineering	3,500	S	1,600	1,200	500	100

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-60. Number of 1991 science and engineering master's degree recipients residing in the United States who are U.S. citizens, foreign born, and number who attended a foreign high school, by field of degree: April 1993

Major field	Total recipients	U.S. citizens	Foreign born	Attended foreign high school
All science and engineering fields	57,000	45,000	15,800	13,500
Major type				
Total science	36,900	30,300	8,800	7,400
Total engineering	20,100	14,700	7,000	6,100
Major field				
Computer and mathematical sciences, total	13,000	9,700	4,300	3,700
Computer science and information sciences	8,700	6,300	3,200	2,700
Mathematics and related sciences	4,300	3,400	1,100	1,000
Life and related sciences, total	6,900	5,900	1,400	1,100
Agricultural and food sciences	1,100	900	300	300
Biological sciences	5,300	4,600	1,000	800
Environmental life sciences including forestry sciences	500	500	S	S
Physical and related sciences, total	5,200	4,100	1,400	1,300
Chemistry, except biochemistry	1,500	1,100	500	500
Earth sciences, geology, and oceanography	1,900	1,800	200	200
Physics and astronomy	1,600	1,100	600	500
Other physical sciences	100	100	S	S
Social and related sciences, total	11,800	10,700	1,700	1,400
Economics	1,700	1,300	500	400
Political science and related sciences	1,500	1,400	200	200
Psychology	5,100	4,700	500	500
Sociology and anthropology	1,700	1,500	300	300
Other social sciences	1,900	1,700	100	100
Engineering, total	20,100	14,700	7,000	6,100
Aerospace and related engineering	1,000	800	200	100
Chemical engineering	700	500	300	300
Civil and architectural engineering	2,600	1,700	1,000	900
Electrical, electronic, computer and communications engineering	8,100	5,800	3,200	2,700
Industrial engineering	1,200	900	500	400
Mechanical engineering	3,100	2,200	1,100	900
Other engineering	3,500	2,800	900	800

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.
NOTE: Details may not add to totals because of rounding.
SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-61. Number of 1991 science and engineering master's degree recipients residing in the United States who are native-born or naturalized U.S. citizens and number who are permanent or temporary residents, by field of degree: April 1993

Major field	Total recipients	U.S. citizen		Non-U.S. citizen	
		Native born	Naturalized	Permanent resident	Temporary resident/ other
All science and engineering fields	57,000	41,900	3,100	4,700	7,200
Major type					
Total science	36,900	28,700	1,600	2,900	3,700
Total engineering	20,100	13,300	1,500	1,800	3,600
Major field					
Computer and mathematical sciences, total	13,000	9,000	700	1,800	1,600
Computer science and information sciences	8,700	5,700	500	1,500	900
Mathematics and related sciences	4,300	3,300	100	200	700
Life and related sciences, total	6,900	5,700	200	400	600
Agricultural and food sciences	1,100	800	S	S	200
Biological sciences	5,300	4,400	100	300	400
Environmental life sciences including forestry sciences	500	500	S	S	S
Physical and related sciences, total	5,200	3,900	200	300	800
Chemistry, except biochemistry	1,500	1,000	S	200	300
Earth sciences, geology, and oceanography	1,900	1,800	S	S	100
Physics and astronomy	1,600	1,000	100	S	400
Other physical sciences	100	S	S	S	S
Social and related sciences, total	11,800	10,100	500	500	600
Economics	1,700	1,200	100	200	200
Political science and related sciences	1,500	1,300	100	S	S
Psychology	5,100	4,500	200	100	200
Sociology and anthropology	1,700	1,400	S	100	100
Other social sciences	1,900	1,700	S	S	S
Engineering, total	20,100	13,300	1,500	1,800	3,600
Aerospace and related engineering	1,000	800	S	S	100
Chemical engineering	700	400	S	S	200
Civil and architectural engineering	2,600	1,600	S	300	500
Electrical, electronic, computer and communications engineering	8,100	4,900	900	800	1,500
Industrial engineering	1,200	800	100	100	200
Mechanical engineering	3,100	2,000	200	400	500
Other engineering	3,500	2,600	100	200	500

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-62. Number of 1991 science and engineering master's degree recipients who received financial support from various sources for 1991 master's degree, by field of degree: April 1993

Major field	Total recipients	Sources of support							
		Earnings from employment	Gifts from parents/ relatives	Scholarships, grants, fellowships	Loans from college, bank, government	Assistantships, work study	Employee assistance	Loans from parents or relatives	Other sources
All science and engineering fields	57,000	30,800	15,200	28,600	11,700	29,500	17,200	3,200	1,800
Major type									
Total science	36,900	21,200	9,900	19,000	9,500	20,200	9,200	2,000	1,300
Total engineering	20,100	9,500	5,300	9,600	2,200	9,300	8,000	1,300	500
Major field									
Computer and mathematical sciences, total	13,000	7,200	2,800	5,000	2,100	5,800	4,700	600	300
Computer science and information sciences	8,700	4,600	2,000	2,600	1,200	3,100	3,900	500	100
Mathematics and related sciences	4,300	2,500	800	2,500	800	2,700	800	100	200
Life and related sciences, total	6,900	3,900	2,100	4,200	1,800	4,200	1,700	300	300
Agricultural and food sciences	1,100	600	400	700	300	700	300	S	S
Biological sciences	5,300	3,000	1,700	3,200	1,300	3,300	1,200	200	300
Environmental life sciences including forestry sciences	500	300	S	300	200	200	200	S	S
Physical and related sciences, total	5,200	2,300	1,200	3,500	1,100	3,900	1,100	200	200
Chemistry, except biochemistry	1,500	600	300	1,000	300	1,200	300	S	S
Earth sciences, geology, and oceanography	1,900	1,200	500	1,300	600	1,500	400	100	200
Physics and astronomy	1,600	500	300	1,100	200	1,200	400	S	S
Other physical sciences	100	S	S	S	S	S	S	S	S
Social and related sciences, total	11,800	7,800	3,700	6,200	4,500	6,400	1,700	800	500
Economics	1,700	900	600	1,000	400	1,000	300	S	S
Political science and related sciences	1,500	1,000	300	700	600	700	400	100	100
Psychology	5,100	3,500	1,800	2,700	2,400	2,800	500	400	200
Sociology and anthropology	1,700	1,100	500	1,100	600	1,100	200	100	S
Other social sciences	1,900	1,200	600	700	500	800	400	100	100
Engineering, total	20,100	9,500	5,300	9,600	2,200	9,300	8,000	1,300	500
Aerospace and related engineering	1,000	400	200	500	200	400	400	S	S
Chemical engineering	700	200	200	500	S	400	200	S	S
Civil and architectural engineering	2,600	1,100	800	1,400	500	1,400	800	200	200
Electrical, electronic, computer and communications engineering	8,100	3,800	2,000	3,400	700	3,100	3,400	300	S
Industrial engineering	1,200	700	300	500	100	500	600	S	S
Mechanical engineering	3,100	1,500	1,100	1,600	400	1,700	1,000	300	S
Other engineering	3,500	1,900	700	1,700	300	1,600	1,600	100	200

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Respondents may have multiple sources of support. Therefore, column entries will not add to "Total recipients."

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-63. Number of 1991 science and engineering master's degree recipients who have taken additional courses since most recent degree, and enrollment status on April 15, 1993, by field of degree: April 1993

Major field	Total recipients	Have taken additional courses since most recent degree 1/	April 15, 1993 status		
			Full-time student	Part-time student	Not student
All science and engineering fields	57,000	24,300	11,900	4,400	40,700
Major type					
Total science	36,900	16,600	9,000	2,800	25,100
Total engineering	20,100	7,700	3,000	1,500	15,600
Major field					
Computer and mathematical sciences, total	13,000	4,000	2,000	700	10,300
Computer science and information sciences	8,700	1,800	900	200	7,500
Mathematics and related sciences	4,300	2,200	1,000	500	2,800
Life and related sciences, total	6,900	3,700	1,900	700	4,300
Agricultural and food sciences	1,100	500	200	S	900
Biological sciences	5,300	3,000	1,600	600	3,100
Environmental life sciences including forestry sciences	500	200	S	S	400
Physical and related sciences, total	5,200	2,800	1,800	200	3,200
Chemistry, except biochemistry	1,500	800	500	S	1,000
Earth sciences, geology, and oceanography	1,900	900	300	100	1,400
Physics and astronomy	1,600	1,100	900	S	600
Other physical sciences	100	S	S	S	S
Social and related sciences, total	11,800	6,100	3,300	1,200	7,300
Economics	1,700	900	400	200	1,100
Political science and related sciences	1,500	700	400	200	900
Psychology	5,100	2,600	1,500	600	2,900
Sociology and anthropology	1,700	1,100	600	100	900
Other social sciences	1,900	800	300	S	1,500
Engineering, total	20,100	7,700	3,000	1,500	15,600
Aerospace and related engineering	1,000	400	200	S	700
Chemical engineering	700	300	200	S	400
Civil and architectural engineering	2,600	900	300	100	2,100
Electrical, electronic, computer and communications engineering	8,100	2,900	900	600	6,500
Industrial engineering	1,200	500	200	S	1,000
Mechanical engineering	3,100	1,300	400	300	2,400
Other engineering	3,500	1,300	600	300	2,600

1/	Excludes those receiving a degree between April 15 and date of interview (May-November 1993)
KEY:	S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.
NOTE:	Details may not add to totals because of rounding.
SOURCE:	National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-64. Number of 1991 science and engineering master's degree recipients who have not taken courses since most recent degree, and likelihood they will take additional courses, by field of degree: April 1993

Major field	Total number not taking courses since most recent degree 1/	Likelihood will take classes		
		Very likely	Somewhat likely	Very unlikely
All science and engineering fields	30,300	16,300	10,500	3,600
Major type				
Total science	18,700	10,000	6,500	2,200
Total engineering	11,600	6,300	3,900	1,400
Major field				
Computer and mathematical sciences, total	8,800	4,800	2,700	1,200
Computer science and information sciences	6,800	3,700	2,200	900
Mathematics and related sciences	2,000	1,100	500	300
Life and related sciences, total	2,800	1,400	1,200	300
Agricultural and food sciences	600	300	300	S
Biological sciences	2,000	1,000	800	200
Environmental life sciences including forestry sciences	300	100	S	S
Physical and related sciences, total	2,200	1,100	900	200
Chemistry, except biochemistry	700	300	400	S
Earth sciences, geology, and oceanography	1,000	500	400	S
Physics and astronomy	400	200	100	S
Other physical sciences	S	S	S	S
Social and related sciences, total	5,000	2,700	1,700	600
Economics	700	200	400	100
Political science and related sciences	700	300	200	200
Psychology	2,100	1,200	600	200
Sociology and anthropology	600	400	200	S
Other social sciences	900	500	300	S
Engineering, total	11,600	6,300	3,900	1,400
Aerospace and related engineering	500	300	100	S
Chemical engineering	300	200	100	S
Civil and architectural engineering	1,500	900	400	200
Electrical, electronic, computer and communications engineering	4,800	2,500	1,700	700
Industrial engineering	700	400	200	S
Mechanical engineering	1,700	900	600	200
Other engineering	1,900	1,100	700	100

1/ Excludes those receiving a degree between April 15 and date of interview (May-November 1993)

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-65. Number of 1991 science and engineering master's degree recipients who have taken courses since most recent degree, and type of degree sought, by field of degree: April 1993

Major field	Total recipients	Have taken additional courses since most recent degree 1/	Types of degree sought				
			No specific degree	Ph.D. degree	Prof degree	MA degree	Other or BA degree
All science and engineering fields	57,000	24,300	6,500	14,700	700	1,900	500
Major type							
Total science	36,900	16,600	4,100	10,400	600	1,100	400
Total engineering	20,100	7,700	2,400	4,300	100	800	S
Major field							
Computer and mathematical sciences, total	13,000	4,000	1,000	2,500	S	400	S
Computer science and information sciences	8,700	1,800	400	1,000	S	300	S
Mathematics and related sciences	4,300	2,200	600	1,400	S	S	S
Life and related sciences, total	6,900	3,700	1,100	2,000	400	100	100
Agricultural and food sciences	1,100	500	100	300	S	S	S
Biological sciences	5,300	3,000	800	1,700	400	100	S
Environmental life sciences including forestry sciences	500	200	100	S	S	S	S
Physical and related sciences, total	5,200	2,800	600	1,900	S	300	S
Chemistry, except biochemistry	1,500	800	100	500	S	S	S
Earth sciences, geology, and oceanography	1,900	900	400	400	S	100	S
Physics and astronomy	1,600	1,100	100	900	S	100	S
Other physical sciences	100	S	S	S	S	S	S
Social and related sciences, total	11,800	6,100	1,400	4,100	S	300	200
Economics	1,700	900	200	600	S	S	S
Political science and related sciences	1,500	700	S	500	S	S	S
Psychology	5,100	2,600	500	1,800	S	100	100
Sociology and anthropology	1,700	1,100	200	800	S	S	S
Other social sciences	1,900	800	400	300	S	S	S
Engineering, total	20,100	7,700	2,400	4,300	100	800	S
Aerospace and related engineering	1,000	400	S	300	S	S	S
Chemical engineering	700	300	S	300	S	S	S
Civil and architectural engineering	2,600	900	500	400	S	S	S
Electrical, electronic, computer and communications engineering	8,100	2,900	800	1,600	S	400	S
Industrial engineering	1,200	500	100	200	S	100	S
Mechanical engineering	3,100	1,300	400	700	S	200	S
Other engineering	3,500	1,300	400	900	S	100	S

1/ Excludes those receiving a degree between April 15 and date of interview (May-November 1993)

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-66. Number of 1991 science and engineering master's degree recipients who are employed, employed full time, employed part time, and number who have a second job, by field of degree: April 1993

Major field	Total recipients	Employed	Employed full time	Employed part time	Having a second job
All science and engineering fields	57,000	51,700	42,300	9,400	6,700
Major type					
Total science	36,900	32,800	25,600	7,200	5,700
Total engineering	20,100	18,800	16,600	2,200	1,000
Major field					
Computer and mathematical sciences, total	13,000	12,100	10,200	1,900	2,000
Computer science and information sciences	8,700	8,100	7,200	900	1,200
Mathematics and related sciences	4,300	4,100	3,000	1,000	800
Life and related sciences, total	6,900	5,700	4,600	1,100	700
Agricultural and food sciences	1,100	900	800	100	S
Biological sciences	5,300	4,300	3,400	900	600
Environmental life sciences including forestry sciences	500	500	400	S	S
Physical and related sciences, total	5,200	4,700	3,500	1,200	300
Chemistry, except biochemistry	1,500	1,400	1,200	200	S
Earth sciences, geology, and oceanography	1,900	1,800	1,500	300	100
Physics and astronomy	1,600	1,400	700	600	S
Other physical sciences	100	100	S	S	S
Social and related sciences, total	11,800	10,300	7,300	3,000	2,700
Economics	1,700	1,300	1,000	300	200
Political science and related sciences	1,500	1,200	800	400	200
Psychology	5,100	4,600	3,300	1,200	1,400
Sociology and anthropology	1,700	1,500	900	600	300
Other social sciences	1,900	1,700	1,200	500	500
Engineering, total	20,100	18,800	16,600	2,200	1,000
Aerospace and related engineering	1,000	900	800	100	S
Chemical engineering	700	600	500	100	S
Civil and architectural engineering	2,600	2,300	2,100	200	S
Electrical, electronic, computer and communications engineering	8,100	7,700	6,900	800	300
Industrial engineering	1,200	1,200	1,000	200	100
Mechanical engineering	3,100	2,800	2,500	300	S
Other engineering	3,500	3,300	2,800	400	300

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-67. Number of 1991 science and engineering master's degree recipients who are employed, unemployed, and not in the labor force, by field of degree: April 1993

Major field	Total recipients	Employed	Unemployed 1/	Not in labor force
All science and engineering fields	57,000	51,700	1,400	3,900
Major type				
Total science	36,900	32,800	900	3,100
Total engineering	20,100	18,800	500	800
Major field				
Computer and mathematical sciences, total	13,000	12,100	300	500
Computer science and information sciences	8,700	8,100	300	200
Mathematics and related sciences	4,300	4,100	S	200
Life and related sciences, total	6,900	5,700	200	1,000
Agricultural and food sciences	1,100	900	S	100
Biological sciences	5,300	4,300	S	900
Environmental life sciences including forestry sciences	500	500	S	S
Physical and related sciences, total	5,200	4,700	S	400
Chemistry, except biochemistry	1,500	1,400	S	100
Earth sciences, geology, and oceanography	1,900	1,800	S	S
Physics and astronomy	1,600	1,400	S	200
Other physical sciences	100	100	S	S
Social and related sciences, total	11,800	10,300	300	1,100
Economics	1,700	1,300	200	200
Political science and related sciences	1,500	1,200	S	300
Psychology	5,100	4,600	S	400
Sociology and anthropology	1,700	1,500	S	200
Other social sciences	1,900	1,700	S	S
Engineering, total	20,100	18,800	500	800
Aerospace and related engineering	1,000	900	S	S
Chemical engineering	700	600	S	S
Civil and architectural engineering	2,600	2,300	100	100
Electrical, electronic, computer and communications engineering	8,100	7,700	100	200
Industrial engineering	1,200	1,200	S	S
Mechanical engineering	3,100	2,800	S	200
Other engineering	3,500	3,300	S	100

1/ The unemployed are those who were not working on April 15 and who were seeking work or who were on layoff from a job.

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-68. Number of 1991 science and engineering master's degree recipients who are not full-time students, and number of non-full-time students who are not in the labor force, in the labor force, employed, and unemployed, by field of degree: April 1993

Major field	Not full-time students				
				In labor force	
	Total number	Not in labor force	In labor force	Employed	Unemployed 1/
All science and engineering fields	45,100	1,400	43,700	42,600	1,100
Major type					
Total science	27,900	1,100	26,800	26,100	700
Total engineering	17,200	300	16,900	16,500	400
Major field					
Computer and mathematical sciences, total	11,000	200	10,800	10,600	300
Computer science and information sciences	7,700	S	7,700	7,400	300
Mathematics and related sciences	3,300	S	3,200	3,200	S
Life and related sciences, total	5,000	400	4,700	4,500	100
Agricultural and food sciences	900	S	800	800	S
Biological sciences	3,700	300	3,400	3,300	S
Environmental life sciences including forestry sciences	400	S	400	400	S
Physical and related sciences, total	3,400	S	3,300	3,300	S
Chemistry, except biochemistry	1,100	S	1,000	1,000	S
Earth sciences, geology, and oceanography	1,600	S	1,600	1,600	S
Physics and astronomy	700	S	700	600	S
Other physical sciences	S	S	S	S	S
Social and related sciences, total	8,400	500	8,000	7,700	300
Economics	1,200	S	1,200	1,000	200
Political science and related sciences	1,100	200	900	800	S
Psychology	3,500	100	3,400	3,300	S
Sociology and anthropology	1,100	S	1,000	1,000	S
Other social sciences	1,500	S	1,500	1,500	S
Engineering, total	17,200	300	16,900	16,500	400
Aerospace and related engineering	700	S	700	700	S
Chemical engineering	500	S	500	400	S
Civil and architectural engineering	2,200	S	2,200	2,100	S
Electrical, electronic, computer and communications engineering	7,100	200	6,900	6,800	100
Industrial engineering	1,100	S	1,000	1,000	S
Mechanical engineering	2,700	S	2,700	2,600	S
Other engineering	2,900	S	2,800	2,800	S

1/ The unemployed are those who were not working on April 15 and who were seeking work or who were on layoff from a job.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-69. Number of 1991 science and engineering master's degree recipients who are not working, and reasons for not working, by field of degree: April 1993

Major field	Total recipients	Total not working	Reasons for not working					
			Student	Suitable job not available	Family responsibilities	On layoff	Not need/ want to work	Other
All science and engineering fields	57,000	5,400	3,300	500	700	100	500	800
Major type								
Total science	36,900	4,000	2,500	400	600	100	300	500
Total engineering	20,100	1,300	800	100	100	S	100	300
Major field								
Computer and mathematical sciences, total	13,000	800	400	100	100	S	S	100
Computer science and information sciences	8,700	600	200	100	S	S	S	100
Mathematics and related sciences	4,300	300	100	S	S	S	S	S
Life and related sciences, total	6,900	1,200	800	100	200	S	S	S
Agricultural and food sciences	1,100	200	100	S	S	S	S	S
Biological sciences	5,300	1,000	700	S	200	S	S	S
Environmental life sciences including forestry sciences	500	S	S	S	S	S	S	S
Physical and related sciences, total	5,200	500	400	S	S	S	S	S
Chemistry, except biochemistry	1,500	200	100	S	S	S	S	S
Earth sciences, geology, and oceanography	1,900	100	S	S	S	S	S	S
Physics and astronomy	1,600	200	200	S	S	S	S	S
Other physical sciences	100	S	S	S	S	S	S	S
Social and related sciences, total	11,800	1,500	900	S	200	S	200	300
Economics	1,700	400	200	S	S	S	S	S
Political science and related sciences	1,500	300	200	S	S	S	S	200
Psychology	5,100	500	300	S	S	S	100	100
Sociology and anthropology	1,700	200	100	S	S	S	S	S
Other social sciences	1,900	100	S	S	S	S	S	S
Engineering, total	20,100	1,300	800	100	100	S	100	300
Aerospace and related engineering	1,000	S	S	S	S	S	S	S
Chemical engineering	700	100	S	S	S	S	S	S
Civil and architectural engineering	2,600	200	100	S	S	S	S	S
Electrical, electronic, computer and communications engineering	8,100	400	100	S	S	S	S	100
Industrial engineering	1,200	S	S	S	S	S	S	S
Mechanical engineering	3,100	300	200	S	S	S	S	S
Other engineering	3,500	200	200	S	S	S	S	S

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Respondents may indicate more than one reason for not working. Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-70. Number of employed 1991 science and engineering master's degree recipients, by occupation and field of degree: April 1993

Major field	Total employed	Occupation					
		Computer and mathematical scientists	Life and related scientists	Physical scientists	Social and related scientists	Engineers	Other fields 1/
All science and engineering fields	51,700	9,800	3,400	4,000	4,900	14,500	15,000
Major type							
Total science	32,800	7,600	3,300	3,700	4,900	1,000	12,400
Total engineering	18,800	2,200	S	400	S	13,500	2,600
Major field							
Computer and mathematical sciences, total	12,100	7,000	100	S	S	400	4,500
Computer science and information sciences	8,100	5,100	S	S	S	100	2,800
Mathematics and related sciences	4,100	2,000	100	S	S	200	1,700
Life and related sciences, total	5,700	100	2,800	200	S	100	2,400
Agricultural and food sciences	900	S	500	S	S	S	300
Biological sciences	4,300	S	2,200	100	S	S	1,900
Environmental life sciences including forestry sciences	500	S	S	S	S	S	200
Physical and related sciences, total	4,700	100	200	3,300	S	400	600
Chemistry, except biochemistry	1,400	S	200	900	S	S	200
Earth sciences, geology, and oceanography	1,800	S	S	1,400	S	S	200
Physics and astronomy	1,400	S	S	800	S	200	200
Other physical sciences	100	S	S	S	S	S	S
Social and related sciences, total	10,300	300	200	S	4,700	S	5,000
Economics	1,300	100	S	S	600	S	600
Political science and related sciences	1,200	S	S	S	500	S	600
Psychology	4,600	S	S	S	2,600	S	1,900
Sociology and anthropology	1,500	S	S	S	700	S	700
Other social sciences	1,700	100	S	S	300	S	1,200
Engineering, total	18,800	2,200	S	400	S	13,500	2,600
Aerospace and related engineering	900	S	S	S	S	700	100
Chemical engineering	600	S	S	S	S	500	S
Civil and architectural engineering	2,300	S	S	S	S	2,100	200
Electrical, electronic, computer and communications engineering	7,700	1,500	S	S	S	5,000	1,100
Industrial engineering	1,200	100	S	S	S	800	200
Mechanical engineering	2,800	200	S	S	S	2,300	200
Other engineering	3,300	300	S	300	S	2,000	600

1/ This broad category includes the following occupations: managers and related occupations; health and related occupations; educators other than S&E postsecondary; social services and related occupations; technicians, including computer programmers; sales and marketing occupations; and all other occupations.

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-71. Number of employed 1991 science and engineering master's degree recipients who have a job for which license or certification is required or recommended, and number of these that have license or certificate, by sex and field of degree: April 1993

Major field	Total employed	Number for whom license or certificate required or recommended			Number for whom license or certificate required or recommended who have license or certificate		
		Total	Male	Female	Total	Male	Female
All science and engineering fields	51,700	15,900	10,000	5,900	7,700	4,600	3,100
Major type							
Total science	32,800	10,200	5,300	4,900	5,600	2,900	2,700
Total engineering	18,800	5,600	4,700	1,000	2,000	1,600	400
Major field							
Computer and mathematical sciences, total	12,100	2,900	1,900	1,000	1,700	900	800
Computer science and information sciences	8,100	1,500	1,200	300	700	500	200
Mathematics and related sciences	4,100	1,400	700	700	1,000	400	600
Life and related sciences, total	5,700	2,000	900	1,100	1,400	700	700
Agricultural and food sciences	900	300	200	100	200	100	S
Biological sciences	4,300	1,500	600	800	1,100	500	600
Environmental life sciences including forestry sciences	500	200	S	100	100	S	S
Physical and related sciences, total	4,700	1,200	900	300	500	400	100
Chemistry, except biochemistry	1,400	300	200	S	200	100	S
Earth sciences, geology, and oceanography	1,800	800	500	300	300	200	S
Physics and astronomy	1,400	200	100	S	S	S	S
Other physical sciences	100	S	S	S	S	S	S
Social and related sciences, total	10,300	4,100	1,600	2,500	2,000	900	1,100
Economics	1,300	200	200	S	200	100	S
Political science and related sciences	1,200	400	300	S	200	100	S
Psychology	4,600	2,700	900	1,800	1,100	500	600
Sociology and anthropology	1,500	300	S	200	100	S	100
Other social sciences	1,700	600	100	400	400	100	300
Engineering, total	18,800	5,600	4,700	1,000	2,000	1,600	400
Aerospace and related engineering	900	200	200	S	100	100	S
Chemical engineering	600	200	200	S	S	S	S
Civil and architectural engineering	2,300	1,900	1,400	500	800	600	200
Electrical, electronic, computer and communications engineering	7,700	900	900	S	200	200	S
Industrial engineering	1,200	400	300	100	200	100	S
Mechanical engineering	2,800	1,000	900	S	200	200	S
Other engineering	3,300	1,000	800	200	500	300	100

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.
NOTE: Details may not add to totals because of rounding.
SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-72. Number of 1991 science and engineering master's degree recipients who have had a career path job since being awarded most recent degree, and number not having career path job, who are seeking one, by sex and field of degree: April 1993

Major field	Total recipients	Number having a career path job			Number not having career path job	Number of those not having a career path job who are seeking a career path job		
		Total	Male	Female		Total	Male	Female
All science and engineering fields	57,000	37,500	26,000	11,500	19,500	7,200	5,200	2,100
Major type								
Total science	36,900	22,500	13,300	9,300	14,400	5,200	3,400	1,800
Total engineering	20,100	15,000	12,700	2,300	5,100	2,000	1,800	200
Major field								
Computer and mathematical sciences, total	13,000	8,900	5,900	3,000	4,100	2,000	1,500	500
Computer science and information sciences	8,700	6,400	4,600	1,800	2,300	1,400	1,100	200
Mathematics and related sciences	4,300	2,500	1,300	1,200	1,800	600	400	200
Life and related sciences, total	6,900	4,100	2,100	2,000	2,800	900	500	300
Agricultural and food sciences	1,100	700	500	200	400	200	100	S
Biological sciences	5,300	3,000	1,400	1,600	2,300	600	400	200
Environmental life sciences including forestry sciences	500	400	200	200	100	S	S	S
Physical and related sciences, total	5,200	3,200	2,300	900	2,000	500	400	100
Chemistry, except biochemistry	1,500	900	600	300	600	100	S	S
Earth sciences, geology, and oceanography	1,900	1,600	1,100	400	400	100	100	S
Physics and astronomy	1,600	600	500	100	1,000	200	200	S
Other physical sciences	100	100	S	S	S	S	S	S
Social and related sciences, total	11,800	6,300	3,000	3,400	5,400	1,900	1,000	900
Economics	1,700	800	500	200	900	300	200	S
Political science and related sciences	1,500	800	700	200	700	300	200	S
Psychology	5,100	3,100	1,100	2,000	2,000	600	200	400
Sociology and anthropology	1,700	800	200	500	900	300	100	200
Other social sciences	1,900	1,000	500	400	900	400	200	200
Engineering, total	20,100	15,000	12,700	2,300	5,100	2,000	1,800	200
Aerospace and related engineering	1,000	700	600	S	300	S	S	S
Chemical engineering	700	400	400	S	300	S	S	S
Civil and architectural engineering	2,600	2,000	1,500	500	500	200	100	S
Electrical, electronic, computer and communications engineering	8,100	6,100	5,400	700	2,000	800	700	100
Industrial engineering	1,200	1,000	800	200	300	100	S	S
Mechanical engineering	3,100	2,300	2,000	200	800	400	400	S
Other engineering	3,500	2,600	2,000	500	900	300	300	S

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-73. Number of employed 1991 science and engineering master's degree recipients having job closely, somewhat, and not related to degree, by field of degree: April 1993

Major field	Total employed	Relationship of degree to job		
		Closely related	Somewhat related	Not related
All science and engineering fields	51,700	35,100	12,300	4,300
Major type				
Total science	32,800	23,300	7,100	2,400
Total engineering	18,800	11,700	5,200	1,900
Major field				
Computer and mathematical sciences, total	12,100	9,000	2,600	600
Computer science and information sciences	8,100	5,900	1,800	300
Mathematics and related sciences	4,100	3,000	700	300
Life and related sciences, total	5,700	4,200	1,200	300
Agricultural and food sciences	900	700	200	S
Biological sciences	4,300	3,200	900	200
Environmental life sciences including forestry sciences	500	300	200	S
Physical and related sciences, total	4,700	3,300	1,000	400
Chemistry, except biochemistry	1,400	1,000	200	S
Earth sciences, geology, and oceanography	1,800	1,200	400	200
Physics and astronomy	1,400	900	300	S
Other physical sciences	100	100	S	S
Social and related sciences, total	10,300	6,900	2,300	1,100
Economics	1,300	800	400	S
Political science and related sciences	1,200	700	300	200
Psychology	4,600	3,200	900	500
Sociology and anthropology	1,500	900	300	200
Other social sciences	1,700	1,200	400	100
Engineering, total	18,800	11,700	5,200	1,900
Aerospace and related engineering	900	600	200	100
Chemical engineering	600	400	200	S
Civil and architectural engineering	2,300	1,900	300	100
Electrical, electronic, computer and communications engineering	7,700	4,700	2,000	1,000
Industrial engineering	1,200	700	400	S
Mechanical engineering	2,800	1,500	1,000	300
Other engineering	3,300	1,900	1,100	300

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-74. Number of employed 1991 science and engineering master's degree recipients, by sex, race/ethnicity, and occupation: April 1993

Occupation	Total employed	Sex		Race/ethnicity				
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native
All employed science and engineering graduates	51,700	35,900	15,800	38,200	2,200	1,700	9,400	200
Occupation type								
Total scientists	22,100	14,200	7,900	16,200	900	700	4,300	S
Total engineers	14,500	12,500	2,000	9,700	500	700	3,600	S
Total other occupations	15,100	9,200	5,800	12,200	800	400	1,600	S
Occupation								
Computer and mathematical scientists	9,800	7,200	2,600	6,400	500	200	2,700	S
Life and related scientists	3,400	1,900	1,500	2,700	100	100	500	S
Physical scientists	4,000	2,700	1,300	3,000	S	100	800	S
Social and related scientists	4,900	2,400	2,500	4,100	200	200	400	S
Engineers	14,500	12,500	2,000	9,700	500	700	3,600	S
Managers and related occupations	4,400	3,300	1,100	3,600	300	100	300	S
Health and related occupations	800	300	500	600	S	S	100	S
Educators other than S&E postsecondary	2,900	1,000	1,900	2,600	100	S	S	S
Social services and related occupations	800	300	500	600	S	S	S	S
Technicians including computer programmers	2,600	1,800	800	1,700	200	S	700	S
Sales and marketing occupations	1,400	1,000	300	1,200	S	S	200	S
Other occupations	2,300	1,400	800	1,900	100	S	300	S

KEY: S = Data values below 100 are suppressed for reasons of confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-75. Number of employed 1991 science and engineering master's degree recipients, by age and occupation: April 1993

Occupation	Total employed	Age				
		Less than 25	25-29	30-34	35-39	40 or more
All employed science and engineering graduates	51,700	800	24,600	14,800	6,700	4,800
Occupation type						
Total scientists	22,100	300	11,100	6,200	2,800	1,800
Total engineers	14,500	200	7,700	4,400	1,600	700
Total other occupations	15,100	300	5,900	4,300	2,400	2,300
Occupation						
Computer and mathematical scientists	9,800	S	4,600	2,800	1,400	900
Life and related scientists	3,400	S	2,000	1,000	300	S
Physical scientists	4,000	S	2,100	1,300	400	200
Social and related scientists	4,900	100	2,400	1,100	600	600
Engineers	14,500	200	7,700	4,400	1,600	700
Managers and related occupations	4,400	200	1,400	1,300	600	900
Health and related occupations	800	S	200	300	300	S
Educators other than S&E postsecondary	2,900	S	700	1,000	600	600
Social services and related occupations	800	S	300	200	200	100
Technicians including computer programmers	2,600	S	1,400	600	200	300
Sales and marketing occupations	1,400	S	800	300	200	S
Other occupations	2,300	S	1,200	500	300	200

KEY: S = Data values below 100 are suppressed for reasons of confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-76. Number of employed 1991 science and engineering master's degree recipients, by sector of employment and occupation: April 1993

Occupation	Total employed	Sector of employment						
		Private, for profit company	Self-employed	4-year college and university	Other educational	Nonprofit organizations	Federal government	State or local government
All employed science and engineering graduates	51,700	24,800	1,200	12,400	3,900	1,900	4,900	2,500
Occupation type								
Total scientists	22,100	8,400	400	8,400	1,100	700	1,900	1,300
Total engineers	14,500	9,500	S	2,300	S	400	1,600	500
Total other occupations	15,100	6,900	800	1,700	2,800	800	1,400	700
Occupation								
Computer and mathematical scientists	9,800	5,600	300	2,300	600	S	800	S
Life and related scientists	3,400	600	S	2,000	300	S	200	300
Physical scientists	4,000	1,700	S	1,600	S	S	400	100
Social and related scientists	4,900	500	S	2,400	200	500	400	800
Engineers	14,500	9,500	S	2,300	S	400	1,600	500
Managers and related occupations	4,400	2,300	200	400	200	200	1,000	200
Health and related occupations	800	200	200	200	S	100	S	S
Educators other than S&E postsecondary	2,900	S	S	300	2,400	S	S	S
Social services and related occupations	800	S	S	S	100	300	S	200
Technicians including computer programmers	2,600	2,000	S	500	S	S	S	S
Sales and marketing occupations	1,400	1,100	200	S	S	S	S	S
Other occupations	2,300	1,300	200	300	S	200	200	100

KEY: S = Data values below 100 are suppressed for reasons of confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-77. Number of employed 1991 science and engineering master's degree recipients, by sector of employment and field of degree: April 1993

Major field	Total employed	Sector of employment						
		Private, for profit company	Self-employed	4-year college and university	Other educational	Nonprofit organizations	Federal government	State or local government
All science and engineering fields	51,700	24,800	1,200	12,400	3,900	1,900	4,900	2,500
Major type								
Total science	32,800	12,300	1,100	9,500	3,900	1,500	2,600	2,000
Total engineering	18,800	12,400	200	2,900	S	300	2,400	600
Major field								
Computer and mathematical sciences, total	12,100	6,700	400	2,200	1,500	S	1,000	200
Computer science and information sciences	8,100	5,600	400	1,000	200	S	900	S
Mathematics and related sciences	4,100	1,100	S	1,200	1,300	S	200	100
Life and related sciences, total	5,700	1,300	200	2,300	1,000	S	500	300
Agricultural and food sciences	900	300	S	400	S	S	100	S
Biological sciences	4,300	800	200	1,800	900	S	300	300
Environmental life sciences including forestry sciences	500	100	S	S	S	S	S	S
Physical and related sciences, total	4,700	1,900	S	1,700	300	200	400	100
Chemistry, except biochemistry	1,400	600	S	500	100	S	S	S
Earth sciences, geology, and oceanography	1,800	1,000	S	300	S	S	300	S
Physics and astronomy	1,400	300	S	800	S	S	S	S
Other physical sciences	100	S	S	S	S	S	S	S
Social and related sciences, total	10,300	2,400	400	3,200	1,000	1,200	600	1,400
Economics	1,300	600	S	400	S	S	100	S
Political science and related sciences	1,200	200	S	400	S	S	300	S
Psychology	4,600	1,100	200	1,300	200	900	100	700
Sociology and anthropology	1,500	200	S	700	200	200	S	200
Other social sciences	1,700	300	100	400	500	100	S	300
Engineering, total	18,800	12,400	200	2,900	S	300	2,400	600
Aerospace and related engineering	900	400	S	200	S	S	300	S
Chemical engineering	600	400	S	200	S	S	S	S
Civil and architectural engineering	2,300	1,500	S	200	S	S	300	200
Electrical, electronic, computer and communications engineering	7,700	5,200	S	1,200	S	200	900	100
Industrial engineering	1,200	700	S	200	S	S	200	S
Mechanical engineering	2,800	2,000	S	500	S	S	200	S
Other engineering	3,300	2,200	S	500	S	S	400	S

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-78. Number of employed 1991 science and engineering master's degree recipients, by primary work activity and field of degree: April 1993

Major field	Total employed	Primary work activity				
		Research and development (R&D)	Computer applications	Management, sales, administration	Teaching	Other
All science and engineering fields	51,700	19,300	10,900	8,200	7,400	5,800
Major type						
Total science	32,800	10,100	6,600	4,900	6,800	4,400
Total engineering	18,800	9,200	4,300	3,400	600	1,400
Major field						
Computer and mathematical sciences, total	12,100	2,500	5,300	1,600	2,400	300
Computer science and information sciences	8,100	1,200	4,700	1,500	600	100
Mathematics and related sciences	4,100	1,300	600	100	1,800	200
Life and related sciences, total	5,700	2,600	200	800	1,400	700
Agricultural and food sciences	900	600	S	200	S	S
Biological sciences	4,300	1,800	100	500	1,300	600
Environmental life sciences including forestry sciences	500	100	S	200	S	S
Physical and related sciences, total	4,700	2,700	500	600	500	400
Chemistry, except biochemistry	1,400	1,000	S	100	200	S
Earth sciences, geology, and oceanography	1,800	900	200	400	100	300
Physics and astronomy	1,400	800	200	S	300	S
Other physical sciences	100	100	S	S	S	S
Social and related sciences, total	10,300	2,300	700	1,800	2,400	3,000
Economics	1,300	400	200	400	200	S
Political science and related sciences	1,200	200	S	300	400	200
Psychology	4,600	800	200	600	800	2,200
Sociology and anthropology	1,500	500	100	300	400	300
Other social sciences	1,700	400	200	300	700	200
Engineering, total	18,800	9,200	4,300	3,400	600	1,400
Aerospace and related engineering	900	500	200	200	S	S
Chemical engineering	600	400	S	100	S	S
Civil and architectural engineering	2,300	1,200	300	400	S	400
Electrical, electronic, computer and communications engineering	7,700	3,500	2,700	1,100	200	300
Industrial engineering	1,200	400	200	400	S	S
Mechanical engineering	2,800	1,700	500	400	S	200
Other engineering	3,300	1,500	400	900	100	300

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Primary work activity is defined as activity in which respondent worked most hours on job in typical work week. Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-79. Number of employed 1991 science and engineering master's degree recipients, by primary work activity and occupation: April 1993

Occupation	Total employed	Primary work activity				
		Research and development (R&D)	Computer applications	Management, sales, administration	Teaching	Other
All employed science and engineering graduates	51,700	19,300	10,900	8,200	7,400	5,800
Occupation type						
Total scientists	22,100	9,000	5,600	1,600	3,600	2,300
Total engineers	14,500	8,500	2,600	2,000	400	1,000
Total other occupations	15,100	1,800	2,700	4,700	3,400	2,500
Occupation						
Computer and mathematical scientists	9,800	2,500	5,100	800	1,400	S
Life and related scientists	3,400	2,100	S	300	700	200
Physical scientists	4,000	2,600	300	400	400	300
Social and related scientists	4,900	1,800	100	100	1,100	1,700
Engineers	14,500	8,500	2,600	2,000	400	1,000
Managers and related occupations	4,400	300	400	3,100	300	400
Health and related occupations	800	100	S	S	S	500
Educators other than S&E postsecondary	2,900	200	S	S	2,700	S
Social services and related occupations	800	S	S	S	S	600
Technicians including computer programmers	2,600	800	1,600	S	S	100
Sales and marketing occupations	1,400	200	S	1,000	S	100
Other occupations	2,300	200	600	500	300	800

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Primary work activity is defined as activity in which respondent worked most hours on job in typical work week. Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-80. Number of employed 1991 science and engineering master's degree recipients whose work is supported by federal government, and agency giving support, by field of degree: April 1993

Major field	Total employed	Number whose work is supported by federal government	Agency supporting work							
			Department of Defense	Department of Education	Department of Energy	EPA	NASA	NIH	NSF	Other
All science and engineering fields	51,700	10,600	3,900	300	1,300	600	900	1,400	1,400	500
Major type										
Total science	32,800	6,100	1,200	300	600	500	200	1,200	1,100	400
Total engineering	18,800	4,500	2,700	S	700	S	600	200	300	200
Major field										
Computer and mathematical sciences, total	12,100	1,700	700	S	100	S	S	100	400	100
Computer science and information sciences	8,100	1,100	500	S	100	S	S	S	200	100
Mathematics and related sciences	4,100	600	200	S	S	S	S	S	100	S
Life and related sciences, total	5,700	1,400	100	S	S	200	S	600	100	S
Agricultural and food sciences	900	200	S	S	S	S	S	S	S	S
Biological sciences	4,300	1,100	S	S	S	200	S	600	S	S
Environmental life sciences including forestry sciences	500	S	S	S	S	S	S	S	S	S
Physical and related sciences, total	4,700	1,300	200	S	400	100	100	200	500	S
Chemistry, except biochemistry	1,400	400	S	S	S	S	S	200	200	S
Earth sciences, geology, and oceanography	1,800	400	100	S	100	S	S	S	S	S
Physics and astronomy	1,400	500	100	S	200	S	S	S	200	S
Other physical sciences	100	S	S	S	S	S	S	S	S	S
Social and related sciences, total	10,300	1,700	100	200	S	S	S	300	100	200
Economics	1,300	200	S	S	S	S	S	S	S	S
Political science and related sciences	1,200	S	S	S	S	S	S	S	S	S
Psychology	4,600	900	100	S	S	S	S	200	S	100
Sociology and anthropology	1,500	400	S	S	S	S	S	S	S	S
Other social sciences	1,700	200	S	S	S	S	S	S	S	S
Engineering, total	18,800	4,500	2,700	S	700	S	600	200	300	200
Aerospace and related engineering	900	300	200	S	S	S	100	S	S	S
Chemical engineering	600	100	S	S	S	S	S	S	S	S
Civil and architectural engineering	2,300	600	300	S	200	S	S	S	S	S
Electrical, electronic, computer and communications engineering	7,700	1,900	1,400	S	S	S	200	S	100	100
Industrial engineering	1,200	100	S	S	S	S	S	S	S	S
Mechanical engineering	2,800	800	500	S	200	S	200	S	S	S
Other engineering	3,300	700	300	S	200	S	S	S	S	S

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Respondent's work may be supported by more than one federal agency. Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-81. Median salary of full-time employed 1991 master's degree recipients, by sex, race/ethnicity, and field of degree: April 1993

Major field	Total	Sex		Race/ethnicity				
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native
All science and engineering fields	$39,000	$40,200	$32,000	$39,000	$40,000	$40,000	$39,600	$42,000
Major type								
Total science	33,500	35,000	30,000	33,000	35,000	30,000	36,000	S
Total engineering	44,000	44,000	44,400	45,000	52,000	46,000	41,000	S
Major field								
Computer and mathematical sciences, total	40,000	40,000	37,600	40,000	S	S	39,000	S
Computer science and information sciences	41,000	41,000	41,000	42,000	S	S	37,600	S
Mathematics and related sciences	34,000	36,500	32,000	33,000	S	S	S	S
Life and related sciences, total	29,000	29,000	29,000	29,000	S	S	S	S
Agricultural and food sciences	30,000	30,000	29,000	30,000	S	S	S	S
Biological sciences	28,500	28,000	29,000	28,000	S	S	S	S
Environmental life sciences including forestry sciences	39,000	S	S	39,000	S	S	S	S
Physical and related sciences, total	34,000	35,000	31,000	35,000	S	S	31,000	S
Chemistry, except biochemistry	33,000	34,900	26,000	34,900	S	S	30,000	S
Earth sciences, geology, and oceanography	36,000	36,000	36,000	36,000	S	S	S	S
Physics and astronomy	33,000	34,600	S	37,000	S	S	S	S
Other physical sciences	S	S	S	S	S	S	S	S
Social and related sciences, total	28,000	29,500	26,400	28,000	S	S	S	S
Economics	32,000	32,000	S	33,500	S	S	S	S
Political science and related sciences	S	S	S	S	S	S	S	S
Psychology	26,000	25,500	26,000	25,500	S	S	S	S
Sociology and anthropology	26,000	S	25,000	25,000	S	S	S	S
Other social sciences	31,000	S	S	31,000	S	S	S	S
Engineering, total	44,000	44,000	44,400	45,000	52,000	46,000	41,000	S
Aerospace and related engineering	40,000	41,000	S	40,000	S	S	S	S
Chemical engineering	46,000	46,000	S	46,500	S	S	S	S
Civil and architectural engineering	41,100	41,100	41,400	42,500	S	S	39,000	S
Electrical, electronic, computer and communications engineering	45,000	45,000	S	48,000	S	S	42,500	S
Industrial engineering	44,300	44,300	44,000	45,700	S	S	41,600	S
Mechanical engineering	42,000	42,000	S	44,000	S	S	40,000	S
Other engineering	43,000	44,000	43,000	44,000	S	S	35,000	S

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. Unweighted cell size is less than 20.

NOTE: Salary for self-employed persons and for full-time students is not included in data presented in table.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993.

Table B-82. Median salary of full-time employed 1991 master's degree recipients by sex, race/ethnicity, and occupation: April 1993

Occupation	Total	Sex		Race/ethnicity				
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native
All employed science and engineering graduates	$39,000	$40,200	$32,000	$39,000	$40,000	$40,000	$39,600	S
Occupation type								
Total scientists	36,000	39,000	30,000	36,000	S	S	36,000	S
Total engineers	44,000	44,000	45,000	45,000	S	47,000	41,700	S
Total other occupations	33,000	35,000	30,000	33,000	32,000	S	39,000	S
Occupation								
Computer and mathematical scientists	41,000	41,000	40,000	42,000	S	S	39,600	S
Life and related scientists	28,300	28,000	28,300	28,000	S	S	S	S
Physical scientists	34,000	36,000	31,000	36,000	S	S	32,000	S
Social and related scientists	27,000	28,000	26,400	27,000	S	S	S	S
Engineers	44,000	44,000	45,000	45,000	S	47,000	41,700	S
Managers and related occupations	40,000	42,000	33,000	42,000	S	S	S	S
Health and related occupations	S	S	S	S	S	S	S	S
Educators other than S&E postsecondary	29,000	30,000	28,000	29,000	S	S	S	S
Social services and related occupations	S	S	S	S	S	S	S	S
Technicians including computer programmers	39,000	39,000	S	35,000	S	S	S	S
Sales and marketing occupations	38,000	30,000	S	38,000	S	S	S	S
Other occupations	30,000	30,100	26,000	30,100	S	S	S	S

1/ Health-related majors are not included in sample. Salaries are not representative of those received by health-related occupations.

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. Unweighted cell size is less than 20.

NOTE: Salary for self-employed persons and for full-time students is not included in data presented in table.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-83. Median salary of full-time employed 1991 master's degree recipients, by broad sector of employment and field of degree: April 1993

Major field	Total	Broad sector of employment		
		Private industry and business 1/	Educational institution	Government
All science and engineering fields	$39,000	$42,000	$28,700	$40,000
Major type				
Total science	33,500	38,000	28,400	32,400
Total engineering	44,000	44,000	35,000	45,000
Major field				
Computer and mathematical sciences, total	40,000	42,000	34,000	S
Computer science and information sciences	41,000	42,000	S	S
Mathematics and related sciences	34,000	40,000	31,200	S
Life and related sciences, total	29,000	36,000	27,000	29,500
Agricultural and food sciences	30,000	34,000	24,500	S
Biological sciences	28,500	37,000	27,000	S
Environmental life sciences including forestry sciences	39,000	S	S	S
Physical and related sciences, total	34,000	38,400	26,500	32,000
Chemistry, except biochemistry	33,000	36,500	21,000	S
Earth sciences, geology, and oceanography	36,000	38,000	S	S
Physics and astronomy	33,000	45,000	S	S
Other physical sciences	S	S	S	S
Social and related sciences, total	28,000	27,000	27,500	30,000
Economics	32,000	30,000	S	S
Political science and related sciences	S	S	S	S
Psychology	26,000	25,000	S	27,000
Sociology and anthropology	26,000	24,000	S	S
Other social sciences	31,000	S	S	S
Engineering, total	44,000	44,000	35,000	45,000
Aerospace and related engineering	40,000	39,700	S	42,000
Chemical engineering	46,000	46,000	S	S
Civil and architectural engineering	41,100	40,100	S	41,700
Electrical, electronic, computer and communications engineering	45,000	45,000	S	S
Industrial engineering	44,300	45,000	S	44,000
Mechanical engineering	42,000	43,200	S	S
Other engineering	43,000	45,000	S	43,000

1/ Nonprofit included with private industry and business

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. Unweighted cell size is less than 20.

NOTE: Salary for self-employed persons and for full-time students is not included in data presented in table.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993.

Table B-84. Median salary of full-time employed 1991 master's degree recipients, by broad sector of employment and occupation: April 1993

Occupation	Total	Broad sector of employment		
		Private industry and business 1/	Educational institution	Government
All employed science and engineering graduates	$39,000	$42,000	$28,700	$40,000
Occupation type				
Total scientists	36,000	40,000	28,000	33,500
Total engineers	44,000	44,000	35,000	45,000
Total other occupations	33,000	37,600	29,000	38,000
Occupation				
Computer and mathematical scientists	41,000	42,000	35,000	41,000
Life and related scientists	28,300	36,000	24,000	29,100
Physical scientists	34,000	38,000	25,000	33,000
Social and related scientists	27,000	25,500	27,000	28,700
Engineers	44,000	44,000	35,000	45,000
Managers and related occupations	40,000	40,000	S	49,000
Health and related occupations 1/	S	S	S	S
Educators other than S&E postsecondary	29,000	S	29,000	S
Social services and related occupations	S	S	S	S
Technicians including computer programmers	39,000	39,100	S	S
Sales and marketing occupations	38,000	38,000	S	S
Other occupations	30,000	30,000	S	S

1/ Nonprofit included with private industry and business

2/ Health-related majors are not included in sample. Salaries are not representative of those received by health related occupations.

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. Unweighted cell size is less than 20.

NOTE: Salary for self-employed persons and for full-time students is not included in data presented in table.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-85. Number of 1992 science and engineering master's degree recipients, by race/ethnicity, sex, and field of degree: April 1993

Major field	Total recipients	Sex		Race/ethnicity				
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native
All science and engineering fields	58,600	37,900	20,700	41,500	2,200	1,800	13,100	200
Major type								
Total science	37,700	20,400	17,400	27,800	1,700	1,100	7,000	100
Total engineering	20,900	17,600	3,300	13,700	400	700	6,100	S
Major field								
Computer and mathematical sciences, total	11,100	7,400	3,700	6,900	400	200	3,600	S
Computer science and information sciences	7,100	5,300	1,800	4,100	300	100	2,700	S
Mathematics and related sciences	3,900	2,100	1,900	2,800	100	S	900	S
Life and related sciences, total	6,300	3,100	3,200	4,800	300	200	1,000	S
Agricultural and food sciences	900	500	400	700	S	S	100	S
Biological sciences	4,800	2,300	2,600	3,600	300	100	800	S
Environmental life sciences including forestry sciences	500	300	200	500	S	S	S	S
Physical and related sciences, total	5,400	3,900	1,600	3,800	200	100	1,300	S
Chemistry, except biochemistry	1,500	800	700	1,000	S	S	500	S
Earth sciences, geology, and oceanography	1,600	1,200	400	1,400	S	S	100	S
Physics and astronomy	2,100	1,700	400	1,400	100	S	500	S
Other physical sciences	200	100	100	S	S	S	200	S
Social and related sciences, total	14,900	6,000	8,900	12,200	800	600	1,200	S
Economics	2,100	1,400	700	1,400	100	S	500	S
Political science and related sciences	3,200	1,800	1,400	2,700	400	100	S	S
Psychology	6,400	1,700	4,700	5,700	S	300	400	S
Sociology and anthropology	1,800	700	1,100	1,300	100	S	200	S
Other social sciences	1,400	500	1,000	1,100	100	S	S	S
Engineering, total	20,900	17,600	3,300	13,700	400	700	6,100	S
Aerospace and related engineering	1,000	900	S	800	S	S	100	S
Chemical engineering	900	800	200	600	S	100	200	S
Civil and architectural engineering	2,400	1,900	500	1,700	S	100	500	S
Electrical, electronic, computer and communications engineering	7,600	6,700	900	4,800	200	S	2,500	S
Industrial engineering	1,400	1,000	300	800	S	S	500	S
Mechanical engineering	3,300	3,000	300	1,900	S	100	1,300	S
Other engineering	4,400	3,300	1,100	3,100	100	200	900	S

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-86. Number of 1992 science and engineering master's degree recipients, by race/ethnicity, sex, and field of degree: April 1993

Major field	Race/ethnicity									
	White, non-Hispanic		Black, non-Hispanic		Hispanic		Asian or Pacific Islander		American Indian/ Alaskan Native	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
All science and engineering fields	26,100	15,400	1,100	1,000	1,000	700	9,600	3,400	S	S
Major type										
Total science	14,400	13,400	800	900	500	600	4,600	2,400	S	S
Total engineering	11,600	2,100	300	100	500	100	5,100	1,000	S	S
Major field										
Computer and mathematical sciences, total	4,200	2,700	300	S	S	S	2,800	800	S	S
Computer science and information sciences	2,700	1,400	200	S	S	S	2,300	300	S	S
Mathematics and related sciences	1,500	1,400	S	S	S	S	500	400	S	S
Life and related sciences, total	2,400	2,400	200	200	100	S	500	500	S	S
Agricultural and food sciences	400	300	S	S	S	S	S	S	S	S
Biological sciences	1,700	1,900	100	200	S	S	400	400	S	S
Environmental life sciences including forestry sciences	300	200	S	S	S	S	S	S	S	S
Physical and related sciences, total	2,800	1,100	100	S	S	S	900	400	S	S
Chemistry, except biochemistry	500	400	S	S	S	S	300	200	S	S
Earth sciences, geology, and oceanography	1,100	300	S	S	S	S	100	S	S	S
Physics and astronomy	1,100	300	S	S	S	S	400	S	S	S
Other physical sciences	S	S	S	S	S	S	S	100	S	S
Social and related sciences, total	5,100	7,100	300	600	300	400	400	800	S	S
Economics	1,000	500	S	S	S	S	300	200	S	S
Political science and related sciences	1,600	1,000	100	200	S	S	S	S	S	S
Psychology	1,500	4,200	S	S	S	200	S	300	S	S
Sociology and anthropology	600	800	S	100	S	S	S	200	S	S
Other social sciences	400	700	S	100	S	S	S	S	S	S
Engineering, total	11,600	2,100	300	100	500	100	5,100	1,000	S	S
Aerospace and related engineering	700	S	S	S	S	S	100	S	S	S
Chemical engineering	500	100	S	S	S	S	200	S	S	S
Civil and architectural engineering	1,400	400	S	S	100	S	400	100	S	S
Electrical, electronic, computer and communications engineering	4,500	300	100	S	S	S	2,100	400	S	S
Industrial engineering	600	200	S	S	S	S	400	100	S	S
Mechanical engineering	1,700	200	S	S	100	S	1,200	S	S	S
Other engineering	2,300	800	S	S	200	S	700	200	S	S

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-87. Number of 1992 science and engineering master's degree recipients, by age and field of degree: April 1993

Major field	Total recipients	Age				
		Less than 25	25-29	30-34	35-39	40 or more
All science and engineering fields	58,600	4,800	28,800	13,000	6,800	5,300
Major type						
Total science	37,700	2,900	17,600	7,500	5,100	4,600
Total engineering	20,900	1,900	11,100	5,500	1,700	700
Major field						
Computer and mathematical sciences, total	11,100	700	4,600	2,600	1,600	1,500
Computer science and information sciences	7,100	300	3,000	1,600	1,200	1,000
Mathematics and related sciences	3,900	500	1,600	1,000	400	500
Life and related sciences, total	6,300	200	3,300	1,200	800	800
Agricultural and food sciences	900	S	600	100	200	S
Biological sciences	4,800	200	2,500	1,000	500	700
Environmental life sciences including forestry sciences	500	S	200	200	S	S
Physical and related sciences, total	5,400	400	2,600	1,400	800	300
Chemistry, except biochemistry	1,500	200	700	300	200	S
Earth sciences, geology, and oceanography	1,600	S	500	600	300	100
Physics and astronomy	2,100	200	1,200	400	200	S
Other physical sciences	200	S	100	S	S	S
Social and related sciences, total	14,900	1,500	7,200	2,300	1,900	2,100
Economics	2,100	300	900	500	300	100
Political science and related sciences	3,200	200	1,500	600	700	100
Psychology	6,400	900	3,400	600	500	1,000
Sociology and anthropology	1,800	S	700	400	200	300
Other social sciences	1,400	S	700	100	100	400
Engineering, total	20,900	1,900	11,100	5,500	1,700	700
Aerospace and related engineering	1,000	200	500	200	S	S
Chemical engineering	900	S	600	100	S	S
Civil and architectural engineering	2,400	200	1,300	700	200	S
Electrical, electronic, computer and communications engineerin	7,600	700	4,200	1,900	700	100
Industrial engineering	1,400	200	700	300	100	S
Mechanical engineering	3,300	300	2,000	800	200	S
Other engineering	4,400	300	2,000	1,300	400	400

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-88. Number of 1992 science and engineering master's degree recipients residing in the United States who are U.S. citizens, foreign born, and number who attended a foreign high school, by field of degree: April 1993

Major field	Total recipients	U.S. citizens	Foreign born	Attended foreign high school
All science and engineering fields	58,600	45,200	17,100	14,600
Major type				
Total science	37,700	29,800	9,600	8,600
Total engineering	20,900	15,400	7,500	6,000
Major field				
Computer and mathematical sciences, total	11,100	7,300	4,400	4,100
Computer science and information sciences	7,100	4,400	3,200	3,000
Mathematics and related sciences	3,900	2,900	1,200	1,100
Life and related sciences, total	6,300	5,200	1,400	1,200
Agricultural and food sciences	900	700	200	200
Biological sciences	4,800	4,000	1,100	900
Environmental life sciences including forestry sciences	500	500	S	S
Physical and related sciences, total	5,400	3,900	1,700	1,500
Chemistry, except biochemistry	1,500	1,000	600	500
Earth sciences, geology, and oceanography	1,600	1,400	200	200
Physics and astronomy	2,100	1,400	800	700
Other physical sciences	200	S	200	200
Social and related sciences, total	14,900	13,300	2,100	1,800
Economics	2,100	1,400	800	800
Political science and related sciences	3,200	3,100	200	300
Psychology	6,400	6,100	500	300
Sociology and anthropology	1,800	1,500	300	300
Other social sciences	1,400	1,300	200	200
Engineering, total	20,900	15,400	7,500	6,000
Aerospace and related engineering	1,000	800	200	100
Chemical engineering	900	600	400	300
Civil and architectural engineering	2,400	1,700	800	800
Electrical, electronic, computer and communications engineering	7,600	5,800	2,800	2,000
Industrial engineering	1,400	900	600	500
Mechanical engineering	3,300	2,000	1,500	1,300
Other engineering	4,400	3,600	1,200	800

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-89. Number of 1992 science and engineering master's degree recipients residing in the United States who are native-born or naturalized U.S. citizens, and number who are permanent or temporary residents, by field of degree: April 1993

Major field	Total recipients	U.S. citizen		Non-U.S. citizen	
		Native born	Naturalized	Permanent resident	Temporary resident/ other
All science and engineering fields	58,600	42,400	2,800	3,500	10,000
Major type					
Total science	37,700	28,600	1,200	2,100	5,800
Total engineering	20,900	13,800	1,600	1,300	4,200
Major field					
Computer and mathematical sciences, total	11,100	6,900	400	1,100	2,700
Computer science and information sciences	7,100	4,100	300	800	1,900
Mathematics and related sciences	3,900	2,800	200	200	800
Life and related sciences, total	6,300	5,000	200	400	700
Agricultural and food sciences	900	700	S	S	200
Biological sciences	4,800	3,800	200	300	500
Environmental life sciences including forestry sciences	500	500	S	S	S
Physical and related sciences, total	5,400	3,700	200	300	1,200
Chemistry, except biochemistry	1,500	900	S	100	400
Earth sciences, geology, and oceanography	1,600	1,400	S	S	100
Physics and astronomy	2,100	1,300	S	100	600
Other physical sciences	200	S	S	S	200
Social and related sciences, total	14,900	13,000	300	500	1,100
Economics	2,100	1,400	S	100	600
Political science and related sciences	3,200	3,000	S	S	S
Psychology	6,400	5,900	100	100	200
Sociology and anthropology	1,800	1,500	S	S	200
Other social sciences	1,400	1,200	S	S	S
Engineering, total	20,900	13,800	1,600	1,300	4,200
Aerospace and related engineering	1,000	800	S	S	100
Chemical engineering	900	600	S	S	300
Civil and architectural engineering	2,400	1,600	S	100	500
Electrical, electronic, computer and communications engineering	7,600	5,000	900	500	1,200
Industrial engineering	1,400	800	S	S	400
Mechanical engineering	3,300	1,800	200	300	1,000
Other engineering	4,400	3,300	300	200	600

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-90. Number of 1992 science and engineering master's degree recipients who received financial support from various sources for 1992 master's degree, by field of degree: April 1993

Major field	Total recipients	Sources of support							
		Earnings from employment	Gifts from parents/ relatives	Scholarships, grants, fellowships	Loans from college, bank, government	Assistantships, work study	Employee assistance	Loans from parents or relatives	Other sources
All science and engineering fields	58,600	31,500	16,500	30,100	12,000	29,200	17,900	2,900	2,000
Major type									
Total science	37,700	20,800	11,500	20,100	9,700	19,600	9,500	2,100	1,500
Total engineering	20,900	10,700	5,000	10,000	2,300	9,600	8,400	800	500
Major field									
Computer and mathematical sciences, total	11,100	5,600	2,600	4,900	1,200	4,700	4,100	600	400
Computer science and information sciences	7,100	3,400	1,900	2,600	700	2,300	3,200	500	200
Mathematics and related sciences	3,900	2,200	700	2,300	500	2,400	1,000	100	200
Life and related sciences, total	6,300	3,300	2,200	3,600	1,800	3,600	1,400	200	200
Agricultural and food sciences	900	500	300	600	200	700	300	S	S
Biological sciences	4,800	2,500	1,700	2,800	1,400	2,800	1,000	200	200
Environmental life sciences including forestry sciences	500	300	200	300	200	100	200	S	S
Physical and related sciences, total	5,400	2,600	1,200	3,800	1,200	4,100	1,400	200	100
Chemistry, except biochemistry	1,500	600	200	1,000	300	1,000	400	S	S
Earth sciences, geology, and oceanography	1,600	1,000	400	1,100	500	1,100	500	S	S
Physics and astronomy	2,100	800	400	1,500	400	1,700	400	S	S
Other physical sciences	200	200	200	200	S	200	100	S	S
Social and related sciences, total	14,900	9,400	5,600	7,800	5,500	7,200	2,500	1,000	700
Economics	2,100	1,200	600	1,200	400	1,300	500	S	S
Political science and related sciences	3,200	2,100	900	1,800	1,400	1,200	700	300	200
Psychology	6,400	4,000	3,100	3,100	2,900	3,200	900	400	300
Sociology and anthropology	1,800	1,200	600	1,200	500	1,200	200	200	S
Other social sciences	1,400	1,000	300	500	300	400	300	S	S
Engineering, total	20,900	10,700	5,000	10,000	2,300	9,600	8,400	800	500
Aerospace and related engineering	1,000	400	200	400	100	400	400	S	S
Chemical engineering	900	400	200	600	100	500	400	S	S
Civil and architectural engineering	2,400	1,300	700	1,300	400	1,400	600	200	S
Electrical, electronic, computer and communications engineering	7,600	4,200	1,700	3,300	600	2,700	3,300	200	200
Industrial engineering	1,400	800	400	700	200	700	400	S	S
Mechanical engineering	3,300	1,300	1,000	1,600	300	2,000	1,100	300	100
Other engineering	4,400	2,300	900	2,100	500	2,000	2,200	S	100

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Respondents may have multiple sources of support. Therefore, column entries will not add to "Total recipients."

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-91. Number of 1992 science and engineering master's degree recipients who have taken additional courses since most recent degree, and enrollment status on April 15, 1993, by field of degree: April 1993

Major field	Total recipients	Have taken additional courses since most recent degree 1/	April 15, 1993 status		
			Full-time student	Part-time student	Not student
All science and engineering fields	58,600	24,000	14,800	3,800	40,100
Major type					
Total science	37,700	16,200	10,800	2,200	24,800
Total engineering	20,900	7,800	4,000	1,600	15,300
Major field					
Computer and mathematical sciences, total	11,100	3,400	1,800	500	8,800
Computer science and information sciences	7,100	1,600	700	200	6,200
Mathematics and related sciences	3,900	1,800	1,100	300	2,500
Life and related sciences, total	6,300	2,900	1,900	300	4,100
Agricultural and food sciences	900	500	300	S	600
Biological sciences	4,800	2,300	1,600	200	3,100
Environmental life sciences including forestry sciences	500	100	S	S	500
Physical and related sciences, total	5,400	2,900	2,200	200	3,000
Chemistry, except biochemistry	1,500	800	500	S	900
Earth sciences, geology, and oceanography	1,600	600	300	S	1,200
Physics and astronomy	2,100	1,500	1,300	S	700
Other physical sciences	200	100	S	S	100
Social and related sciences, total	14,900	7,000	4,800	1,200	8,800
Economics	2,100	1,000	700	200	1,200
Political science and related sciences	3,200	1,100	700	300	2,200
Psychology	6,400	3,200	2,300	500	3,600
Sociology and anthropology	1,800	1,100	800	100	800
Other social sciences	1,400	500	300	S	1,100
Engineering, total	20,900	7,800	4,000	1,600	15,300
Aerospace and related engineering	1,000	400	300	S	600
Chemical engineering	900	400	300	S	500
Civil and architectural engineering	2,400	800	400	200	1,800
Electrical, electronic, computer and communications engineering	7,600	3,100	1,400	700	5,500
Industrial engineering	1,400	400	200	S	1,100
Mechanical engineering	3,300	1,200	700	200	2,400
Other engineering	4,400	1,600	800	300	3,300

1/ Excludes those receiving a degree between April 15 and date of interview (May-November 1993)

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-92. Number of 1992 science and engineering master's degree recipients who have not taken courses since most recent degree, and likelihood they will take additional courses, by field of degree: April 1993

Major field	Total number not taking courses since most recent degree 1/	Likelihood will take classes		
		Very likely	Somewhat likely	Very unlikely
All science and engineering fields	32,600	19,600	10,100	2,900
Major type				
Total science	20,000	12,200	6,200	1,600
Total engineering	12,600	7,400	3,900	1,300
Major field				
Computer and mathematical sciences, total	7,300	4,300	2,400	600
Computer science and information sciences	5,300	3,000	2,000	400
Mathematics and related sciences	1,900	1,300	400	200
Life and related sciences, total	3,100	1,800	1,000	300
Agricultural and food sciences	400	200	200	S
Biological sciences	2,400	1,400	700	200
Environmental life sciences including forestry sciences	400	200	100	S
Physical and related sciences, total	2,400	1,400	700	200
Chemistry, except biochemistry	700	500	200	S
Earth sciences, geology, and oceanography	1,000	500	300	200
Physics and astronomy	600	400	100	S
Other physical sciences	100	S	S	S
Social and related sciences, total	7,200	4,700	2,100	400
Economics	900	500	300	100
Political science and related sciences	2,000	1,600	400	S
Psychology	2,900	2,000	800	200
Sociology and anthropology	600	300	200	S
Other social sciences	800	300	400	S
Engineering, total	12,600	7,400	3,900	1,300
Aerospace and related engineering	500	400	100	S
Chemical engineering	500	200	200	S
Civil and architectural engineering	1,600	1,000	500	100
Electrical, electronic, computer and communications engineering	4,400	2,600	1,300	500
Industrial engineering	900	500	400	S
Mechanical engineering	2,000	1,200	700	100
Other engineering	2,600	1,600	600	400

1/ Excludes those receiving a degree between April 15 and date of interview (May-November 1993)

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-93. Number of 1992 science and engineering master's degree recipients who have taken courses since most recent degree, and type of degree sought, by field of degree: April 1993

Major field	Total recipients	Have taken additional courses since most recent degree 1/	Types of degree sought				
			No specific degree	Ph.D. degree	Prof degree	MA degree	Other or BA degree
All science and engineering fields	58,600	24,000	4,600	16,100	600	2,100	700
Major type							
Total science	37,700	16,200	2,800	11,000	400	1,400	600
Total engineering	20,900	7,800	1,800	5,100	200	700	S
Major field							
Computer and mathematical sciences, total	11,100	3,400	1,100	1,800	S	300	200
Computer science and information sciences	7,100	1,600	600	700	S	200	S
Mathematics and related sciences	3,900	1,800	500	1,100	S	100	100
Life and related sciences, total	6,300	2,900	500	2,000	200	100	100
Agricultural and food sciences	900	500	100	400	S	S	S
Biological sciences	4,800	2,300	300	1,500	200	100	S
Environmental life sciences including forestry sciences	500	100	S	S	S	S	S
Physical and related sciences, total	5,400	2,900	200	2,300	S	300	S
Chemistry, except biochemistry	1,500	800	S	600	S	S	S
Earth sciences, geology, and oceanography	1,600	600	100	300	S	S	S
Physics and astronomy	2,100	1,500	S	1,300	S	100	S
Other physical sciences	200	100	S	S	S	S	S
Social and related sciences, total	14,900	7,000	1,000	5,000	100	600	300
Economics	2,100	1,000	200	600	S	S	S
Political science and related sciences	3,200	1,100	100	900	S	S	S
Psychology	6,400	3,200	400	2,300	S	400	100
Sociology and anthropology	1,800	1,100	100	900	S	S	S
Other social sciences	1,400	500	200	200	S	S	S
Engineering, total	20,900	7,800	1,800	5,100	200	700	S
Aerospace and related engineering	1,000	400	S	300	S	S	S
Chemical engineering	900	400	S	400	S	S	S
Civil and architectural engineering	2,400	800	200	500	S	S	S
Electrical, electronic, computer and communications engineering	7,600	3,100	800	2,000	S	300	S
Industrial engineering	1,400	400	100	200	S	S	S
Mechanical engineering	3,300	1,200	100	800	S	100	S
Other engineering	4,400	1,600	400	900	S	200	S

1/ Excludes those receiving a degree between April 15 and date of interview (May-November 1993)

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-94. Number of 1992 science and engineering master's degree recipients who are employed, employed full time, employed part time, and number who have a second job, by field of degree: April 1993

Major field	Total recipients	Employed	Employed full time	Employed part time	Having a second job
All science and engineering fields	58,600	51,400	40,100	11,400	5,100
Major type					
Total science	37,700	32,500	23,800	8,700	3,800
Total engineering	20,900	18,900	16,300	2,700	1,300
Major field					
Computer and mathematical sciences, total	11,100	9,800	7,800	2,000	700
Computer science and information sciences	7,100	6,400	5,600	800	200
Mathematics and related sciences	3,900	3,400	2,200	1,200	500
Life and related sciences, total	6,300	5,300	4,100	1,200	600
Agricultural and food sciences	900	800	600	200	S
Biological sciences	4,800	4,000	3,100	900	500
Environmental life sciences including forestry sciences	500	500	400	S	S
Physical and related sciences, total	5,400	4,700	3,400	1,300	300
Chemistry, except biochemistry	1,500	1,300	1,000	300	S
Earth sciences, geology, and oceanography	1,600	1,400	1,200	200	S
Physics and astronomy	2,100	1,700	900	800	S
Other physical sciences	200	200	200	S	S
Social and related sciences, total	14,900	12,800	8,600	4,200	2,200
Economics	2,100	1,800	1,200	700	S
Political science and related sciences	3,200	2,900	2,300	600	500
Psychology	6,400	5,400	3,500	1,900	1,000
Sociology and anthropology	1,800	1,500	800	700	300
Other social sciences	1,400	1,200	800	300	300
Engineering, total	20,900	18,900	16,300	2,700	1,300
Aerospace and related engineering	1,000	900	700	100	S
Chemical engineering	900	800	700	200	S
Civil and architectural engineering	2,400	2,200	1,900	300	S
Electrical, electronic, computer and communications engineering	7,600	6,900	6,000	800	700
Industrial engineering	1,400	1,200	1,100	100	S
Mechanical engineering	3,300	3,000	2,500	500	100
Other engineering	4,400	4,000	3,400	600	200

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-95. Number of 1992 science and engineering master's degree recipients who are employed, unemployed, and not in the labor force, by field of degree: April 1993

Major field	Total recipients	Employed	Unemployed 1/	Not in labor force
All science and engineering fields	58,600	51,400	2,700	4,500
Major type				
Total science	37,700	32,500	1,800	3,500
Total engineering	20,900	18,900	900	1,000
Major field				
Computer and mathematical sciences, total	11,100	9,800	500	800
Computer science and information sciences	7,100	6,400	300	400
Mathematics and related sciences	3,900	3,400	200	400
Life and related sciences, total	6,300	5,300	200	800
Agricultural and food sciences	900	800	S	S
Biological sciences	4,800	4,000	100	700
Environmental life sciences including forestry sciences	500	500	S	S
Physical and related sciences, total	5,400	4,700	300	500
Chemistry, except biochemistry	1,500	1,300	S	100
Earth sciences, geology, and oceanography	1,600	1,400	100	S
Physics and astronomy	2,100	1,700	100	200
Other physical sciences	200	200	S	S
Social and related sciences, total	14,900	12,800	800	1,400
Economics	2,100	1,800	100	200
Political science and related sciences	3,200	2,900	100	200
Psychology	6,400	5,400	400	600
Sociology and anthropology	1,800	1,500	S	200
Other social sciences	1,400	1,200	S	200
Engineering, total	20,900	18,900	900	1,000
Aerospace and related engineering	1,000	900	S	S
Chemical engineering	900	800	S	S
Civil and architectural engineering	2,400	2,200	200	S
Electrical, electronic, computer and communications engineering	7,600	6,900	300	400
Industrial engineering	1,400	1,200	S	S
Mechanical engineering	3,300	3,000	100	200
Other engineering	4,400	4,000	200	200

1/ The unemployed are those who were not working on April 15 and who were seeking work or who were on layoff from a job.

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-96. Number of 1992 science and engineering master's degree recipients who are not full-time students and number of non-full-time students who are not in the labor force, in the labor force, employed, and unemployed, by field of degree: April 1993

Major field	Not full-time students				
				In labor force	
	Total number	Not in labor force	In labor force	Employed	Unemployed 1/
All science and engineering fields	43,900	1,300	42,600	40,700	1,900
Major type					
Total science	27,000	1,000	25,900	24,700	1,200
Total engineering	16,900	300	16,600	16,000	700
Major field					
Computer and mathematical sciences, total	9,200	400	8,800	8,400	400
Computer science and information sciences	6,400	200	6,200	5,900	300
Mathematics and related sciences	2,800	200	2,600	2,500	100
Life and related sciences, total	4,400	200	4,300	4,100	200
Agricultural and food sciences	700	S	600	600	S
Biological sciences	3,300	100	3,200	3,100	100
Environmental life sciences including forestry sciences	500	S	500	500	S
Physical and related sciences, total	3,200	S	3,200	3,000	200
Chemistry, except biochemistry	1,000	S	1,000	900	S
Earth sciences, geology, and oceanography	1,300	S	1,300	1,200	S
Physics and astronomy	800	S	800	700	S
Other physical sciences	200	S	200	200	S
Social and related sciences, total	10,100	400	9,700	9,200	500
Economics	1,400	S	1,300	1,200	S
Political science and related sciences	2,500	S	2,500	2,400	S
Psychology	4,100	S	4,000	3,700	300
Sociology and anthropology	900	S	900	800	S
Other social sciences	1,200	S	1,100	1,000	S
Engineering, total	16,900	300	16,600	16,000	700
Aerospace and related engineering	700	S	700	600	S
Chemical engineering	600	S	600	600	S
Civil and architectural engineering	2,000	S	2,000	1,900	S
Electrical, electronic, computer and communications engineering	6,200	100	6,100	5,900	200
Industrial engineering	1,200	S	1,200	1,100	S
Mechanical engineering	2,600	S	2,600	2,400	100
Other engineering	3,600	S	3,600	3,400	100

1/ The unemployed are those who were not working on April 15 and who were seeking work or who were on layoff from a job.

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-97. Number of 1992 science and engineering master's degree recipients who are not working, and reasons for not working, by field of degree: April 1993

Major field	Total recip-ients	Total not working	Reasons for not working					
			Student	Suitable job not available	Family respon-sibilities	On layoff	Not need/ want to work	Other
All science and engineering fields	58,600	7,200	4,200	1,700	600	300	500	500
Major type								
Total science	37,700	5,200	3,200	1,200	400	200	300	300
Total engineering	20,900	2,000	1,100	500	200	100	200	200
Major field								
Computer and mathematical sciences, total	11,100	1,300	500	400	200	S	S	100
Computer science and information sciences	7,100	700	200	200	200	S	S	100
Mathematics and related sciences	3,900	600	300	200	S	S	S	S
Life and related sciences, total	6,300	1,000	700	200	S	S	S	S
Agricultural and food sciences	900	100	S	S	S	S	S	S
Biological sciences	4,800	800	600	200	S	S	S	S
Environmental life sciences including forestry sciences	500	S	S	S	S	S	S	S
Physical and related sciences, total	5,400	800	600	100	S	S	S	S
Chemistry, except biochemistry	1,500	200	100	S	S	S	S	S
Earth sciences, geology, and oceanography	1,600	200	100	S	S	S	S	S
Physics and astronomy	2,100	300	300	S	S	S	S	S
Other physical sciences	200	S	S	S	S	S	S	S
Social and related sciences, total	14,900	2,100	1,400	400	200	S	300	S
Economics	2,100	300	200	S	S	S	S	S
Political science and related sciences	3,200	300	300	S	S	S	S	S
Psychology	6,400	1,000	500	300	100	S	200	S
Sociology and anthropology	1,800	300	200	S	S	S	S	S
Other social sciences	1,400	200	200	S	S	S	S	S
Engineering, total	20,900	2,000	1,100	500	200	100	200	200
Aerospace and related engineering	1,000	100	S	S	S	S	S	S
Chemical engineering	900	100	S	S	S	S	S	S
Civil and architectural engineering	2,400	200	100	100	S	S	S	S
Electrical, electronic, computer and communications engineering	7,600	700	400	200	100	S	100	S
Industrial engineering	1,400	100	S	S	S	S	S	S
Mechanical engineering	3,300	300	200	100	S	S	S	S
Other engineering	4,400	400	200	S	S	S	S	100

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Respondents may indicate more than one reason for not working. Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-98. Number of employed 1992 science and engineering master's degree recipients, by occupation and field of degree: April 1993

Major field	Total employed	Occupation					
		Computer and mathematical scientists	Life and related scientists	Physical scientists	Social and related scientists	Engineers	Other fields 1/
All science and engineering fields	51,400	8,200	3,300	4,100	4,800	15,100	15,900
Major type							
Total science	32,500	6,300	3,200	3,500	4,800	1,100	13,600
Total engineering	18,900	1,900	S	600	S	14,000	2,300
Major field							
Computer and mathematical sciences, total	9,800	5,800	S	S	S	400	3,600
Computer science and information sciences	6,400	3,800	S	S	S	200	2,400
Mathematics and related sciences	3,400	1,900	S	S	S	100	1,200
Life and related sciences, total	5,300	S	2,700	300	S	S	2,100
Agricultural and food sciences	800	S	400	S	S	S	300
Biological sciences	4,000	S	2,100	S	S	S	1,600
Environmental life sciences including forestry sciences	500	S	100	200	S	S	100
Physical and related sciences, total	4,700	100	300	3,100	S	300	900
Chemistry, except biochemistry	1,300	S	200	900	S	S	200
Earth sciences, geology, and oceanography	1,400	S	S	900	S	100	400
Physics and astronomy	1,700	S	S	1,200	S	200	200
Other physical sciences	200	S	S	S	S	S	S
Social and related sciences, total	12,800	300	200	200	4,700	300	7,100
Economics	1,800	100	100	S	800	S	700
Political science and related sciences	2,900	S	S	S	700	S	2,100
Psychology	5,400	200	S	S	2,200	200	2,800
Sociology and anthropology	1,500	S	S	S	800	S	600
Other social sciences	1,200	S	S	100	S	S	900
Engineering, total	18,900	1,900	S	600	S	14,000	2,300
Aerospace and related engineering	900	S	S	S	S	600	200
Chemical engineering	800	S	S	S	S	700	S
Civil and architectural engineering	2,200	S	S	S	S	1,900	200
Electrical, electronic, computer and communications engineering	6,900	1,200	S	100	S	5,000	500
Industrial engineering	1,200	200	S	S	S	700	300
Mechanical engineering	3,000	100	S	S	S	2,600	200
Other engineering	4,000	200	S	300	S	2,500	900

1/ This broad category includes the following occupations: Managers and related occupations; health and related occupations; educators other than S&E postsecondary; social services and related occupations; technicians, including computer programmers; sales and marketing occupations; and all other occupations.

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-99. Number of employed 1992 science and engineering master's degree recipients who have a job for which license or certification is required or recommended, and number of these that have license or certificate, by sex and field of degree: April 1993

Major field	Total employed	Number for whom license or certificate required or recommended			Number for whom license or certificate required or recommended who have license or certificate		
		Total	Male	Female	Total	Male	Female
All science and engineering fields	51,400	15,000	9,000	6,100	7,200	4,100	3,000
Major type							
Total science	32,500	9,000	4,000	5,000	5,000	2,200	2,800
Total engineering	18,900	6,000	5,000	1,000	2,100	1,900	200
Major field							
Computer and mathematical sciences, total	9,800	1,500	800	700	1,100	500	600
Computer science and information sciences	6,400	500	300	300	400	200	200
Mathematics and related sciences	3,400	900	500	400	700	300	300
Life and related sciences, total	5,300	1,700	700	1,000	1,200	400	800
Agricultural and food sciences	800	200	100	S	200	100	S
Biological sciences	4,000	1,300	500	800	900	200	700
Environmental life sciences including forestry sciences	500	200	100	S	100	S	S
Physical and related sciences, total	4,700	1,100	800	300	600	400	200
Chemistry, except biochemistry	1,300	300	200	100	100	S	S
Earth sciences, geology, and oceanography	1,400	500	400	S	200	200	S
Physics and astronomy	1,700	300	200	100	100	S	S
Other physical sciences	200	S	S	S	S	S	S
Social and related sciences, total	12,800	4,700	1,700	3,000	2,200	900	1,200
Economics	1,800	300	200	S	100	100	S
Political science and related sciences	2,900	900	600	200	700	600	S
Psychology	5,400	2,800	600	2,200	1,000	100	800
Sociology and anthropology	1,500	300	S	200	S	S	S
Other social sciences	1,200	500	100	300	300	S	200
Engineering, total	18,900	6,000	5,000	1,000	2,100	1,900	200
Aerospace and related engineering	900	200	200	S	S	S	S
Chemical engineering	800	300	300	S	S	S	S
Civil and architectural engineering	2,200	1,700	1,400	300	600	600	S
Electrical, electronic, computer and communications engineering	6,900	1,100	900	200	300	300	S
Industrial engineering	1,200	400	300	S	S	S	S
Mechanical engineering	3,000	1,000	900	100	300	200	S
Other engineering	4,000	1,400	1,000	400	700	500	100

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-100. Number of 1992 science and engineering master's degree recipients who have had a career path job since being awarded most recent degree, and number not having career path job who are seeking one, by sex and field of degree: April 1993

Major field	Total recipients	Number having a career path job			Number not having career path job	Number of those not having a career path job who are seeking a career path job		
		Total	Male	Female		Total	Male	Female
All science and engineering fields	58,600	36,700	24,300	12,400	22,000	8,300	5,300	3,100
Major type								
Total science	37,700	22,500	12,300	10,200	15,200	5,600	2,900	2,700
Total engineering	20,900	14,100	11,900	2,200	6,800	2,700	2,400	400
Major field								
Computer and mathematical sciences, total	11,100	8,200	5,600	2,600	2,900	1,400	700	700
Computer science and information sciences	7,100	5,800	4,500	1,300	1,400	700	300	400
Mathematics and related sciences	3,900	2,400	1,100	1,300	1,500	700	400	300
Life and related sciences, total	6,300	3,600	1,600	2,000	2,700	900	500	400
Agricultural and food sciences	900	500	300	300	400	200	S	S
Biological sciences	4,800	2,700	1,100	1,600	2,200	600	300	300
Environmental life sciences including forestry sciences	500	400	200	200	100	S	S	S
Physical and related sciences, total	5,400	2,800	1,900	900	2,600	600	500	100
Chemistry, except biochemistry	1,500	800	400	400	700	200	200	S
Earth sciences, geology, and oceanography	1,600	1,100	900	200	500	100	S	S
Physics and astronomy	2,100	800	500	300	1,300	300	200	S
Other physical sciences	200	200	S	S	S	S	S	S
Social and related sciences, total	14,900	7,900	3,300	4,600	7,000	2,800	1,300	1,500
Economics	2,100	1,100	600	400	1,100	400	400	S
Political science and related sciences	3,200	1,800	1,100	700	1,400	800	500	300
Psychology	6,400	3,400	1,000	2,400	3,000	900	200	700
Sociology and anthropology	1,800	800	300	400	1,000	300	S	300
Other social sciences	1,400	900	200	600	500	300	100	200
Engineering, total	20,900	14,100	11,900	2,200	6,800	2,700	2,400	400
Aerospace and related engineering	1,000	600	500	S	300	100	100	S
Chemical engineering	900	600	500	S	400	100	100	S
Civil and architectural engineering	2,400	1,600	1,300	300	800	400	300	S
Electrical, electronic, computer and communications engineering	7,600	5,200	4,700	500	2,400	700	600	100
Industrial engineering	1,400	900	700	200	400	300	200	S
Mechanical engineering	3,300	2,200	1,900	300	1,100	500	500	S
Other engineering	4,400	3,000	2,300	700	1,400	600	500	100

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.
NOTE: Details may not add to totals because of rounding.
SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-101. Number of employed 1992 science and engineering master's degree recipients having job closely, somewhat, and not related to degree, by field of degree: April 1993

Major field	Total employed	Relationship of degree to job		
		Closely related	Somewhat related	Not related
All science and engineering fields	51,400	34,000	13,100	4,400
Major type				
Total science	32,500	21,900	7,200	3,400
Total engineering	18,900	12,100	5,900	1,000
Major field				
Computer and mathematical sciences, total	9,800	7,100	2,100	600
Computer science and information sciences	6,400	4,800	1,400	200
Mathematics and related sciences	3,400	2,300	700	400
Life and related sciences, total	5,300	3,800	1,100	400
Agricultural and food sciences	800	600	200	S
Biological sciences	4,000	2,900	800	300
Environmental life sciences including forestry sciences	500	300	100	S
Physical and related sciences, total	4,700	3,500	800	300
Chemistry, except biochemistry	1,300	1,000	300	S
Earth sciences, geology, and oceanography	1,400	1,100	200	100
Physics and astronomy	1,700	1,300	300	100
Other physical sciences	200	200	S	S
Social and related sciences, total	12,800	7,500	3,200	2,100
Economics	1,800	900	700	300
Political science and related sciences	2,900	1,400	900	600
Psychology	5,400	3,700	1,000	700
Sociology and anthropology	1,500	900	300	200
Other social sciences	1,200	600	200	300
Engineering, total	18,900	12,100	5,900	1,000
Aerospace and related engineering	900	500	200	100
Chemical engineering	800	600	200	S
Civil and architectural engineering	2,200	1,600	500	S
Electrical, electronic, computer and communications engineering	6,900	4,400	2,300	200
Industrial engineering	1,200	500	600	S
Mechanical engineering	3,000	1,800	900	300
Other engineering	4,000	2,700	1,100	200

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-102. Number of employed 1992 science and engineering master's degree recipients, by sex, race/ethnicity, and occupation: April 1993

Occupation	Total employed	Sex		Race/ethnicity				
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native
All employed science and engineering graduates	51,400	33,600	17,800	37,000	1,800	1,400	11,100	200
Occupation type								
Total scientists	20,400	11,900	8,500	14,300	600	600	4,800	S
Total engineers	15,100	12,900	2,300	10,600	200	400	4,000	S
Total other occupations	15,900	8,800	7,100	12,100	1,000	400	2,300	S
Occupation								
Computer and mathematical scientists	8,200	5,500	2,700	5,300	100	100	2,600	S
Life and related scientists	3,300	1,600	1,600	2,300	100	S	700	S
Physical scientists	4,100	3,000	1,200	3,100	S	100	800	S
Social and related scientists	4,800	1,800	3,000	3,600	300	300	600	S
Engineers	15,100	12,900	2,300	10,600	200	400	4,000	S
Managers and related occupations	4,100	2,900	1,200	3,500	200	200	100	S
Health and related occupations	1,000	100	800	800	S	S	S	S
Educators other than S&E postsecondary	2,500	1,000	1,400	2,200	200	S	S	S
Social services and related occupations	1,000	400	700	800	100	S	S	S
Technicians including computer programmers	2,800	2,200	700	1,200	100	S	1,500	S
Sales and marketing occupations	1,200	700	500	1,000	S	S	S	S
Other occupations	3,300	1,500	1,800	2,500	200	S	500	S

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-103. Number of employed 1992 science and engineering master's degree recipients, by age and occupation: April 1993

Occupation	Total employed	Age				
		Less than 25	25-29	30-34	35-39	40 or more
All employed science and engineering graduates	51,400	4,100	25,400	11,400	5,900	4,600
Occupation type						
Total scientists	20,400	1,700	10,200	4,100	2,500	1,900
Total engineers	15,100	1,300	8,600	3,900	900	400
Total other occupations	15,900	1,100	6,600	3,400	2,600	2,400
Occupation						
Computer and mathematical scientists	8,200	700	4,000	1,700	1,000	800
Life and related scientists	3,300	200	1,800	500	400	300
Physical scientists	4,100	400	1,800	1,100	600	300
Social and related scientists	4,800	500	2,600	700	400	500
Engineers	15,100	1,300	8,600	3,900	900	400
Managers and related occupations	4,100	200	1,500	700	1,000	700
Health and related occupations	1,000	S	300	100	100	400
Educators other than S&E postsecondary	2,500	S	1,000	500	300	600
Social services and related occupations	1,000	100	500	S	200	100
Technicians including computer programmers	2,800	S	1,500	1,000	200	S
Sales and marketing occupations	1,200	200	400	200	200	200
Other occupations	3,300	400	1,500	800	500	200

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-104. Number of employed 1992 science and engineering master's degree recipients, by sector of employment and occupation: April 1993

Occupation	Total employed	Sector of employment						
		Private, for profit company	Self-employed	4-year college and university	Other educational	Nonprofit organizations	Federal government	State or local government
All employed science and engineering graduates	51,400	24,000	900	13,400	3,200	2,800	4,700	2,400
Occupation type								
Total scientists	20,400	7,400	200	8,400	1,100	900	1,500	800
Total engineers	15,100	9,500	100	3,200	S	300	1,600	500
Total other occupations	15,900	7,100	600	1,800	2,100	1,600	1,700	1,100
Occupation								
Computer and mathematical scientists	8,200	4,900	S	1,800	400	300	600	S
Life and related scientists	3,300	600	S	2,000	S	100	200	200
Physical scientists	4,100	1,400	S	2,000	200	S	300	200
Social and related scientists	4,800	600	S	2,600	400	500	300	400
Engineers	15,100	9,500	100	3,200	S	300	1,600	500
Managers and related occupations	4,100	2,100	S	200	S	300	1,200	300
Health and related occupations	1,000	400	S	200	S	300	S	100
Educators other than S&E postsecondary	2,500	S	S	200	2,000	S	S	S
Social services and related occupations	1,000	200	S	100	S	500	S	300
Technicians including computer programmers	2,800	1,900	100	500	S	200	200	S
Sales and marketing occupations	1,200	1,000	100	S	S	S	S	S
Other occupations	3,300	1,600	300	500	S	400	200	300

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.
NOTE: Details may not add to totals because of rounding.
SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-105. Number of employed 1992 science and engineering master's degree recipients, by sector of employment and field of degree: April 1993

Major field	Total employed	Sector of employment						
		Private, for profit company	Self-employed	4-year college and university	Other educational	Nonprofit organizations	Federal government	State or local government
All science and engineering fields	51,400	24,000	900	13,400	3,200	2,800	4,700	2,400
Major type								
Total science	32,500	12,500	700	9,700	3,000	2,400	2,300	1,900
Total engineering	18,900	11,500	200	3,700	200	400	2,400	500
Major field								
Computer and mathematical sciences, total	9,800	5,600	200	1,900	1,000	300	700	200
Computer science and information sciences	6,400	4,700	S	700	200	200	500	200
Mathematics and related sciences	3,400	900	100	1,100	800	100	200	S
Life and related sciences, total	5,300	1,400	S	2,100	700	200	400	400
Agricultural and food sciences	800	200	S	300	S	S	S	S
Biological sciences	4,000	1,000	S	1,700	500	200	300	200
Environmental life sciences including forestry sciences	500	100	S	S	100	S	S	S
Physical and related sciences, total	4,700	1,600	S	2,000	400	200	300	100
Chemistry, except biochemistry	1,300	500	S	600	S	S	S	S
Earth sciences, geology, and oceanography	1,400	700	S	300	S	S	100	S
Physics and astronomy	1,700	300	S	1,100	100	S	100	S
Other physical sciences	200	S	S	S	S	S	S	S
Social and related sciences, total	12,800	3,900	500	3,700	900	1,700	900	1,200
Economics	1,800	800	S	700	S	S	100	S
Political science and related sciences	2,900	800	200	400	100	400	600	300
Psychology	5,400	1,700	200	1,700	300	800	S	700
Sociology and anthropology	1,500	300	S	600	200	200	S	200
Other social sciences	1,200	300	S	300	300	200	S	S
Engineering, total	18,900	11,500	200	3,700	200	400	2,400	500
Aerospace and related engineering	900	400	S	200	S	S	200	S
Chemical engineering	800	400	S	400	S	S	S	S
Civil and architectural engineering	2,200	1,100	S	300	S	S	300	300
Electrical, electronic, computer and communications engineering	6,900	4,400	S	1,200	100	200	800	200
Industrial engineering	1,200	1,000	S	200	S	S	S	S
Mechanical engineering	3,000	2,100	S	600	S	S	200	S
Other engineering	4,000	2,100	S	900	S	S	800	S

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-106. Number of employed 1992 science and engineering master's degree recipients, by primary work activity and field of degree: April 1993

Major field	Total employed	Primary work activity: Research and development (R&D)	Computer applications	Management, sales, administration	Teaching	Other
All science and engineering fields	51,400	20,000	9,800	9,000	6,500	6,200
Major type						
Total science	32,500	9,700	6,000	6,200	5,900	4,800
Total engineering	18,900	10,300	3,900	2,800	600	1,400
Major field						
Computer and mathematical sciences, total	9,800	1,700	4,500	1,000	1,800	700
Computer science and information sciences	6,400	1,100	4,000	600	300	400
Mathematics and related sciences	3,400	600	500	300	1,600	300
Life and related sciences, total	5,300	2,500	200	900	1,100	600
Agricultural and food sciences	800	300	S	200	S	100
Biological sciences	4,000	2,000	100	500	900	400
Environmental life sciences including forestry sciences	500	100	S	200	100	S
Physical and related sciences, total	4,700	2,700	300	500	700	500
Chemistry, except biochemistry	1,300	900	S	S	200	100
Earth sciences, geology, and oceanography	1,400	700	100	300	100	200
Physics and astronomy	1,700	1,000	200	S	300	200
Other physical sciences	200	S	S	S	S	S
Social and related sciences, total	12,800	2,800	900	3,800	2,200	3,000
Economics	1,800	600	200	500	200	200
Political science and related sciences	2,900	700	200	1,100	400	500
Psychology	5,400	1,000	200	1,500	800	2,000
Sociology and anthropology	1,500	400	S	300	400	200
Other social sciences	1,200	S	200	500	300	S
Engineering, total	18,900	10,300	3,900	2,800	600	1,400
Aerospace and related engineering	900	400	200	200	S	S
Chemical engineering	800	500	100	S	S	100
Civil and architectural engineering	2,200	900	400	500	S	400
Electrical, electronic, computer and communications engineering	6,900	4,100	1,900	400	200	200
Industrial engineering	1,200	300	400	400	100	S
Mechanical engineering	3,000	2,000	400	300	200	200
Other engineering	4,000	2,200	500	900	S	300

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Primary work activity is defined as activity in which respondent worked most hours on job in typical work week. Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-107. Number of employed 1992 science and engineering master's degree recipients, by primary work activity and occupation: April 1993

Occupation	Total employed	Primary work activity				
		Research and development (R&D)	Computer applications	Management, sales, administration	Teaching	Other
All employed science and engineering graduates	51,400	20,000	9,800	9,000	6,500	6,200
Occupation type						
Total scientists	20,400	8,600	5,000	1,100	3,600	2,100
Total engineers	15,100	9,600	2,400	1,600	400	1,100
Total other occupations	15,900	1,800	2,400	6,300	2,500	2,900
Occupation						
Computer and mathematical scientists	8,200	1,800	4,400	300	1,300	400
Life and related scientists	3,300	2,300	100	200	500	200
Physical scientists	4,100	2,700	200	300	600	300
Social and related scientists	4,800	1,900	200	200	1,300	1,200
Engineers	15,100	9,600	2,400	1,600	400	1,100
Managers and related occupations	4,100	100	200	3,600	S	200
Health and related occupations	1,000	S	100	S	100	600
Educators other than S&E postsecondary	2,500	100	S	S	2,200	S
Social services and related occupations	1,000	S	S	400	S	500
Technicians including computer programmers	2,800	800	1,600	200	S	100
Sales and marketing occupations	1,200	S	S	1,000	S	S
Other occupations	3,300	500	400	900	S	1,400

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Primary work activity is defined as activity in which respondent worked the most hours on job in typical work week. Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-108. Number of employed 1992 science and engineering master's degree recipients whose work is supported by federal government, and agency giving support, by field of degree: April 1993

Major field	Total employed	Number whose work is supported by federal government	Agency supporting work							
			Department of Defense	Department of Education	Department of Energy	EPA	NASA	NIH	NSF	Other
All science and engineering fields	51,400	12,100	4,400	700	1,400	800	900	1,400	1,600	S
Major type										
Total science	32,500	7,300	1,500	700	900	500	500	1,200	1,200	S
Total engineering	18,900	4,700	3,000	S	500	300	500	300	400	S
Major field										
Computer and mathematical sciences, total	9,800	1,600	900	S	200	S	200	200	S	S
Computer science and information sciences	6,400	1,000	700	S	S	S	200	200	S	S
Mathematics and related sciences	3,400	600	200	S	100	S	S	S	S	S
Life and related sciences, total	5,300	1,400	S	S	S	200	S	600	300	S
Agricultural and food sciences	800	100	S	S	S	S	S	S	S	S
Biological sciences	4,000	1,200	S	S	S	S	S	600	300	S
Environmental life sciences including forestry sciences	500	100	S	S	S	S	S	S	S	S
Physical and related sciences, total	4,700	1,800	300	S	600	100	200	200	600	S
Chemistry, except biochemistry	1,300	400	S	S	S	S	S	200	100	S
Earth sciences, geology, and oceanography	1,400	600	S	S	200	S	S	S	100	S
Physics and astronomy	1,700	900	200	S	300	S	200	S	300	S
Other physical sciences	200	S	S	S	S	S	S	S	S	S
Social and related sciences, total	12,800	2,500	200	600	100	200	S	100	300	S
Economics	1,800	300	S	S	S	S	S	S	S	S
Political science and related sciences	2,900	600	S	S	S	S	S	S	200	S
Psychology	5,400	1,100	S	300	S	S	S	100	S	S
Sociology and anthropology	1,500	200	S	S	S	S	S	S	S	S
Other social sciences	1,200	300	S	100	S	S	S	S	S	S
Engineering, total	18,900	4,700	3,000	S	500	300	500	300	400	S
Aerospace and related engineering	900	400	200	S	S	S	100	S	S	S
Chemical engineering	800	200	S	S	S	S	S	S	S	S
Civil and architectural engineering	2,200	500	S	S	S	100	S	S	S	S
Electrical, electronic, computer and communications engineering	6,900	1,900	1,600	S	S	S	S	S	100	S
Industrial engineering	1,200	S	S	S	S	S	S	S	S	S
Mechanical engineering	3,000	700	400	S	100	S	100	S	100	S
Other engineering	4,000	1,000	500	S	200	100	S	200	100	S

KEY: S = Data values below 100 are suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: Respondent's work may be supported by more than one federal agency. Details may not add to totals because of rounding.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

Table B-109. Median salary of full-time employed 1992 master's degree recipients, by sex, race/ethnicity, and field of degree: April 1993

Major field	Total	Sex		Race/ethnicity				
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native
All science and engineering fields	$37,500	$40,000	$33,000	$38,500	$33,800	$35,000	$36,000	S
Major type								
Total science	33,800	36,000	30,000	33,800	30,000	26,000	35,000	S
Total engineering	41,600	42,000	40,000	43,000	40,000	40,000	38,000	S
Major field								
Computer and mathematical sciences, total	40,000	40,000	38,000	40,000	S	S	36,000	S
Computer science and information sciences	42,000	43,200	S	43,200	S	S	36,000	S
Mathematics and related sciences	35,000	33,500	35,000	35,000	S	S	S	S
Life and related sciences, total	29,500	30,000	28,900	29,000	S	S	S	S
Agricultural and food sciences	30,000	30,600	S	29,000	S	S	S	S
Biological sciences	28,000	26,000	28,900	28,000	S	S	S	S
Environmental life sciences including forestry sciences	33,700	S	S	34,000	S	S	S	S
Physical and related sciences, total	35,000	36,000	34,000	37,000	S	S	32,000	S
Chemistry, except biochemistry	34,000	35,900	34,000	35,900	S	S	S	S
Earth sciences, geology, and oceanography	39,000	39,000	S	40,000	S	S	S	S
Physics and astronomy	35,000	35,000	S	37,800	S	S	S	S
Other physical sciences	S	S	S	S	S	S	S	S
Social and related sciences, total	28,000	31,200	26,500	28,600	S	S	S	S
Economics	31,200	31,200	S	32,000	S	S	S	S
Political science and related sciences	34,700	41,000	S	35,000	S	S	S	S
Psychology	26,500	28,000	25,000	26,500	S	S	S	S
Sociology and anthropology	22,700	S	21,600	23,400	S	S	S	S
Other social sciences	S	S	S	S	S	S	S	S
Engineering, total	41,600	42,000	40,000	43,000	S	40,000	38,000	S
Aerospace and related engineering	41,000	40,000	S	41,600	S	S	S	S
Chemical engineering	42,000	42,000	S	43,000	S	S	S	S
Civil and architectural engineering	36,000	36,000	S	37,000	S	S	S	S
Electrical, electronic, computer and communications engineering	43,000	43,000	S	43,800	S	S	40,000	S
Industrial engineering	40,000	40,000	37,100	42,500	S	S	36,000	S
Mechanical engineering	41,000	40,000	S	43,000	S	S	38,500	S
Other engineering	42,000	43,800	39,000	43,800	S	S	35,000	S

1/ Salary for self-employed persons and for full-time students is not included in data presented in table.

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. Unweighted cell size less than 20.

NOTE: Salary for self-employed persons and for full-time students not included in data presented in table.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993.

Table B-110. Median salary of full-time employed 1992 master's degree recipients, by sex, race/ethnicity, and occupation: April 1993

Occupation	Total	Sex		Race/ethnicity				
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native
All employed science and engineering graduates	$37,500	$40,000	$33,000	$38,500	$33,800	$35,000	$36,000	S
Occupation type								
Total scientists	36,000	38,000	32,000	S	26,000	S	36,000	S
Total engineers	41,600	42,000	41,000	42,300	S	40,000	39,000	S
Total other occupations	33,000	35,000	28,600	33,000	34,000	S	33,000	S
Occupation								
Computer and mathematical scientists	41,000	42,000	39,000	42,000	S	S	39,000	S
Life and related scientists	29,000	29,000	28,900	28,900	S	S	S	S
Physical scientists	35,000	36,000	34,000	35,800	S	S	33,800	S
Social and related scientists	27,800	S	26,000	28,000	S	S	S	S
Engineers	41,600	42,000	41,000	42,300	S	40,000	39,000	S
Managers and related occupations	42,000	45,000	35,000	42,000	S	S	S	S
Health and related occupations 1/	28,600	S	S	S	S	S	S	S
Educators other than S&E postsecondary	30,000	31,500	27,000	31,000	S	S	S	S
Social services and related occupations	25,000	S	S	S	S	S	S	S
Technicians including computer programmers	35,000	35,400	S	40,000	S	S	33,000	S
Sales and marketing occupations	25,000	S	S	25,000	S	S	S	S
Other occupations	26,400	27,200	23,000	26,400	S	S	S	S

1/ Health-related majors are not included in sample. Salaries are not representative of those received by health-related occupations.

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. Unweighted cell size is less than 20.

NOTE: Salary for self-employed persons and for full-time students is not included in data presented in table.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates (NSRCG), 1993

Table B-111. Median salary of full-time employed 1992 master's degree recipients, by broad sector of employment and field of degree: April 1993

Major field	Total	Broad sector of employment		
		Private industry and business 1/	Educational institution	Government
All science and engineering fields	$37,500	$40,000	$27,000	$38,000
Major type				
Total science	33,800	36,000	26,400	34,000
Total engineering	41,600	42,000	36,000	42,000
Major field				
Computer and mathematical sciences, total	40,000	42,000	30,000	S
Computer science and information sciences	42,000	43,000	S	S
Mathematics and related sciences	35,000	36,000	29,000	S
Life and related sciences, total	29,500	35,000	26,400	30,000
Agricultural and food sciences	30,000	S	S	S
Biological sciences	28,000	35,000	26,000	S
Environmental life sciences including forestry sciences	33,700	S	S	S
Physical and related sciences, total	35,000	38,000	25,000	33,600
Chemistry, except biochemistry	34,000	38,000	S	S
Earth sciences, geology, and oceanography	39,000	40,000	S	S
Physics and astronomy	35,000	36,000	S	S
Other physical sciences	S	S	S	S
Social and related sciences, total	28,000	28,000	24,500	31,000
Economics	31,200	32,000	S	S
Political science and related sciences	34,700	29,000	S	48,000
Psychology	26,500	28,000	S	S
Sociology and anthropology	22,700	S	S	S
Other social sciences	S	S	S	S
Engineering, total	41,600	42,000	36,000	42,000
Aerospace and related engineering	41,000	41,000	S	41,600
Chemical engineering	42,000	44,000	S	S
Civil and architectural engineering	36,000	36,000	S	37,000
Electrical, electronic, computer and communications engineering	43,000	43,000	S	S
Industrial engineering	40,000	40,000	S	S
Mechanical engineering	41,000	41,000	S	S
Other engineering	42,000	44,000	S	42,000

1/ Nonprofit included with private industry and business

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. Unweighted cell size is less than 20. Details may not add to totals because of rounding.

NOTE: Salary for self-employed persons and for full-time students is not included in data presented in table.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993.

Table B-112. Mean salary of full-time employed 1992 master's degree recipients, by broad sector of employment and occupation: April 1993

Occupation	Total	Broad sector of employment		
		Private industry and business 1/	Educational institutions	Government
All employed science and engineering graduates	$37,500	$40,000	$27,000	$38,000
Occupation type				
Total scientists	36,000	39,000	26,000	35,000
Total engineers	41,600	42,000	39,600	43,000
Total other occupations	33,000	34,000	26,500	36,000
Occupation				
Computer and mathematical scientists	41,000	42,000	S	S
Life and related scientists	29,000	36,000	25,000	S
Physical scientists	35,000	36,000	S	35,000
Social and related scientists	27,800	28,000	S	S
Engineers	41,600	42,000	39,600	43,000
Managers and related occupations	42,000	45,000	S	42,000
Health and related occupations 2/	28,600	S	S	S
Educators other than S&E postsecondary	30,000	S	29,500	S
Social services and related occupations	25,000	S	S	S
Technicians including computer programmers	35,000	35,000	S	S
Sales and marketing occupations	25,000	25,000	S	S
Other occupations	26,400	27,500	S	S

1/ Nonprofit included with private industry and business

2/ Health-related majors are not included in sample. Salaries are not representative of those received by health-related occupations.

KEY: S = Data are suppressed for reasons of respondent confidentiality and/or data reliability. Unweighted cell size is less than 20.

NOTE: Salary for self-employed persons and for full-time students is not included in data presented in table.

SOURCE: National Science Foundation/SRS, National Survey of Recent College Graduates, 1993

SECTION C. SURVEY INSTRUMENT

OMB No.: 3145-0077

Expires: April 30, 1994

National Survey of Recent College Graduates

This information is solicited under the authority of the National Science Foundation Act of 1950, as amended. All information you provide will be treated as confidential and will be used for statistical purposes only. Information will be released only in the form of statistical summaries from which it will be impossible to identify any particular person. Your response is entirely voluntary and failure to provide some or all of the requested information will not in any way adversely affect you.

Conducted by:

Westat, Inc.
Rockville, MD

for the
National Science Foundation
Washington, DC

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INSTRUCTIONS

Thank you for taking the time to complete this important questionnaire. The directions for filling it out are provided with each question. Because not all questions will apply to everyone, you may be asked to skip certain questions.

- In order to get comparable data, we will be asking you to refer to the week of April 15, 1993 when answering most questions
- If no "SKIP" instruction is provided, you should continue to the NEXT question
- Either a pen or pencil may be used
- When answering questions that require marking a box, please use an "X"
- If you need to change an answer, please make sure that your old answer is either completely erased or clearly crossed out

Thanks again for your help, we really appreciate it.

PART A: EDUCATION

A1. In what year did you receive your high school diploma or high school equivalency certificate?

19 |__|__| OR ☐ Did not finish high school
YEAR

A2. In what state or foreign country did you last attend high school?

State: ________________________ OR

Foreign Country: __________________ |__|__|__|
Office Use Only

A3. Have you EVER taken courses at a community college?

1☐ Yes

2☐ No → SKIP TO A4X

A4. (IF YES) **For which of the following reasons have you taken courses at a community college.**

MARK (X) YES OR NO FOR EACH

	YES	NO
a. To complete a high school equivalency certificate (e.g., GED)	1☐	2☐
b. As part of a high school advanced placement (AP) program	1☐	2☐
c. To prepare for college/increase chances of being accepted into college	1☐	2☐
d. To complete an associate's degree	1☐	2☐
e. To complete credits toward a bachelor's degree	1☐	2☐
f. To acquire FURTHER skills or knowledge in my academic or occupational field	1☐	2☐
g. To help facilitate a change in my academic or occupational field	1☐	2☐
h. To increase opportunities for promotion/advancement/higher salary	1☐	2☐
i. For leisure/personal interest	1☐	2☐
j. Other (*Specify:* ____________________)	1☐	2☐

A4X. Do you have a 2-year associate's degree?

1☐ Yes

2☐ No

A5. When you FIRST entered college to begin working on a bachelor's degree, in what field of study did you want to major?

☐ MARK (X) THIS BOX IF YOU WERE UNDECIDED AND THEN SKIP TO A7

Major Field
of Study: ____________________________

A6. Using the EDUCATION CODES (List A, pages 16-17) choose the code that BEST describes your first intended major.

|__|__|__| CODE

A7. Using a 4-point scale, what was your overall UNDERGRADUATE grade point average (GPA)?

- If you have more than one bachelor's degree: Give your overall grade point average for your FIRST Bachelor's degree.

MARK (X) ONE

1☐ 3.75 - 4.00 GPA (Mostly A's)
2☐ 3.25 - 3.74 GPA (About half A's/half B's)
3☐ 2.75 - 3.24 GPA (Mostly B's)
4☐ 2.25 - 2.74 GPA (About half B's/half C's)
5☐ 1.75 - 2.24 GPA (Mostly C's)
6☐ 1.25 - 1.74 GPA (About half C's/half D's)
7☐ Less than 1.25 (Mostly D's or below)
8☐ Have not taken courses for which grades were given

A9. Do you have a bachelor's or higher degree?

1☐ Yes

2☐ No → SKIP TO B4 (PAGE 5)

A10. (IF YES) **How many college or university degrees do you have at the bachelor's level or higher?**

|__| NUMBER

A11. Starting with your MOST RECENT college or university degree, please provide the following information for each degree at the bachelor's level or higher.

- If more than 3 relevant degrees, complete the grid for your two most recent degrees and your FIRST bachelor's degree

MOST RECENT DEGREE	2ND MOST RECENT DEGREE	1ST B.A. DEGREE (If not previously reported)
a. From which school did you receive this degree? ______________ (School Name) ______________ (City/Town) ______________ (State/Foreign Country)	**a. From which school did you receive this degree?** ______________ (School Name) ______________ (City/Town) ______________ (State/Foreign Country)	**a. From which school did you receive this degree?** ______________ (School Name) ______________ (City/Town) ______________ (State/Foreign Country)
b. In what month and year was this degree awarded? ___ ___ 19 ___ ___ MONTH YEAR	**b. In what month and year was this degree awarded?** ___ ___ 19 ___ ___ MONTH YEAR	**b. In what month and year was this degree awarded?** ___ ___ 19 ___ ___ MONTH YEAR
c. What type of degree did you receive? MARK (X) ONE 1☐ Bachelor's 2☐ Master's (includes MBA) 3☐ Doctorate 4☐ Other professional degree (e.g., JD, LLB, ThD, MD, DDS, etc.) 5☐ Other *(Specify)*: ______________	**c. What type of degree did you receive?** MARK (X) ONE 1☐ Bachelor's 2☐ Master's (includes MBA) 3☐ Doctorate 4☐ Other professional degree (e.g., JD, LLB, ThD, MD, DDS, etc.) 5☐ Other *(Specify)*: ______________	**c. What type of degree did you receive?** MARK (X) ONE 1☐ Bachelor's 2☐ Master's (includes MBA) 3☐ Doctorate 4☐ Other professional degree (e.g., JD, LLB, ThD, MD, DDS, etc.) 5☐ Other *(Specify)*: ______________
d. Using the EDUCATION CODES (List A: pages 16-17), select the relevant degree field code(s) and title(s). Major Field: ______________ CODE: ___ ___ ___ Second Major or Minor: ______________ CODE: ___ ___ ___	**d. Using the EDUCATION CODES (List A: pages 16-17), select the relevant degree field code(s) and title(s).** Major Field: ______________ CODE: ___ ___ ___ Second Major or Minor: ______________ CODE: ___ ___ ___	**d. Using the EDUCATION CODES (List A: pages 16-17), select the relevant degree field code(s) and title(s).** Major Field: ______________ CODE: ___ ___ ___ Second Major or Minor: ______________ CODE: ___ ___ ___
e. From which, if any, of these sources did you receive financial support for this degree? MARK (X) ALL THAT APPLY 1☐ Financial support from parents/other relatives, not to be repaid 2☐ Loans from the school you attended, banks, federal or state govt. 3☐ Loans from parents or other relatives 4☐ Financial assistance from your employer 5☐ Tuition waivers, fellowships, grants, scholarships 6☐ Assistantships/Work Study 7☐ Earnings from employment 8☐ Other *(Specify)*: ______________	**e. From which, if any, of these sources did you receive financial support for this degree?** MARK (X) ALL THAT APPLY 1☐ Financial support from parents/other relatives, not to be repaid 2☐ Loans from the school you attended, banks, federal or state govt. 3☐ Loans from parents or other relatives 4☐ Financial assistance from your employer 5☐ Tuition waivers, fellowships, grants, scholarships 6☐ Assistantships/Work Study 7☐ Earnings from employment 8☐ Other *(Specify)*: ______________	**e. From which, if any, of these sources did you receive financial support for this degree?** MARK (X) ALL THAT APPLY 1☐ Financial support from parents/other relatives, not to be repaid 2☐ Loans from the school you attended, banks, federal or state govt. 3☐ Loans from parents or other relatives 4☐ Financial assistance from your employer 5☐ Tuition waivers, fellowships, grants, scholarships 6☐ Assistantships/Work Study 7☐ Earnings from employment 8☐ Other *(Specify)*: ______________

A12a. Thinking ONLY about undergraduate degrees you have completed, what is the TOTAL amount you have borrowed FROM ANY SOURCE to finance your UNDERGRADUATE degree(s)?

- Include total amount borrowed from ALL sources, (e.g., government, private lenders, parents, relatives, friends). INCLUDE LOANS THAT HAVE BEEN REPAID OR FORGIVEN.

a. $__________________ OR

☐ NONE → SKIP TO A12c

b. (IF ANY) As of the week of April 15, 1993 how much of this amount did you still owe?

$__________________ OR

☐ NONE

A12c. Thinking ONLY about graduate degrees you have completed, what is the TOTAL amount you have borrowed FROM ANY SOURCE to finance your GRADUATE degree(s)?

☐ MARK (X) THIS BOX IF NO GRADUATE DEGREES, THEN SKIP TO A13b

- Include total amount borrowed from ALL sources, (e.g., government, private lenders, parents, relatives, friends). INCLUDE LOANS THAT HAVE BEEN REPAID OR FORGIVEN.

c. $__________________ OR

☐ NONE → SKIP TO A13a

d. (IF ANY) As of the week of April 15, 1993 how much of this amount did you still owe?

$__________________ OR

☐ NONE

Questions A13a-A24 ask about college or university courses you may have taken between completing your MOST recent degree and the week of April 15, 1993.

A13a. Have you completed a degree since the week of April 15, 1993?

1☐ Yes → SKIP TO A22 (PAGE 4)

2☐ No

A13b. Between completing your most recent degree and the week of April 15, 1993, did you take any college or university courses?

1☐ Yes

2☐ No

A13c. In that period, were you enrolled in a way other than courses in a college or university, for example Ph.D. research?

1☐ Yes → SKIP TO A17 (PAGE 4)

2☐ No

A13d. ☐ MARK (X) HERE IF YOU ANSWERED "YES" TO A13b OR A13c, THEN SKIP TO A17 (PAGE 4)

A14. Why weren't you taking college courses during that time period?

MARK (X) YES OR NO FOR EACH	YES	NO
a. I had achieved my educational goals (at least temporarily)	1☐	2☐
b. I was waiting for the next school term to start	1☐	2☐
c. Financial reasons (e.g., too expensive, needed the money for other priorities)	1☐	2☐
d. Had a job, needed to work	1☐	2☐
e. Had to stop due to family responsibilities (e.g., caring for children or other family members, had a baby)	1☐	2☐
f. Moved, could no longer take courses at the school I was attending	1☐	2☐
g. No longer certain of which field of study I wanted to pursue	1☐	2☐
h. Needed a break, tired of going to school	1☐	2☐
i. Other (*Specify:* ______________________________)	1☐	2☐

A15. Have you taken any college or university courses since the week of April 15, 1993?

1☐ Yes → SKIP TO PART B (PAGE 5)

2☐ No

A16. (IF NO) How likely is it that you will one day take additional college or university courses?

1☐ Very likely

2☐ Somewhat likely

3☐ Very unlikely

→ SKIP TO PART B (PAGE 5)

A17. For which of the following reasons were you enrolled in a college or university or did you take college courses between completing your most recent degree and the week of April 15, 1993?

MARK (X) YES OR NO FOR EACH

	YES	NO
a. To acquire further education before beginning a career	1☐	2☐
b. To prepare for graduate school	1☐	2☐
c. To facilitate a change in my academic or occupational field	1☐	2☐
d. To acquire FURTHER skills or knowledge in my academic or occupational field	1☐	2☐
e. For licensure/certification	1☐	2☐
f. To increase opportunities for promotion/advancement/higher salary	1☐	2☐
g. Required or expected by employer	1☐	2☐
h. For leisure/personal interest	1☐	2☐
i. Other (*Specify:* ______________________)	1☐	2☐

A18. What was your primary field of study during that time?

☐ MARK (X) THIS BOX IF NO PRIMARY FIELD OF STUDY AND THEN SKIP TO A20

Primary Field of Study:

____

____

A19. Using the EDUCATION CODES (List A, pages 16-17) choose the code that BEST describes your primary field of study during that time.

|___|___|___| CODE

A20. Toward what type of degree, if any, are you (or were you) working during that time?

MARK (X) ONE

1☐ No specific degree

2☐ Bachelor's

3☐ Master's (including MBA)

4☐ Doctorate

5☐ Other professional degree (e.g., JD, LLB, ThD, MD, DDS, etc.)

6☐ Other degree (*Specify:*

______________________________)

A21. From which of these sources did you receive financial support for coursework completed during that time?

MARK (X) ALL THAT APPLY

1☐ Financial support from parents/other relatives, not to be repaid

2☐ Loans from the school you attended, banks, federal or state government

3☐ Loans from parents or other relatives

4☐ Financial assistance from your employer

5☐ Tuition waivers, fellowships, grants, scholarships

6☐ Assistantships/Work Study

7☐ Earnings from employment

8☐ Other (*Specify:*

______________________________)

A22. More specifically, were you taking college or university courses during the week of April 15, 1993?

- Mark "Yes" if you were enrolled in school but on vacation that week

1☐ Yes

2☐ No → SKIP TO PART B (PAGE 5)

A23. (IF YES) **What college or university were you attending during the week of April 15, 1993?**

- Please DO NOT ABBREVIATE the school name

Name:______________________________

____

(City/Town) (State/Foreign Country)

A24. Were you taking courses as a:

1☐ Part-time student?

2☐ Full-time student?

PART B: EMPLOYMENT STATUS

In this section we will be asking about your employment status at two points in time: (1) immediately after you received your most recent degree, and (2) during a more recent time--the week of April 15, 1993.

B1. At any time during the 3 months following the completion of your MOST RECENT degree, did you have (or had you accepted) what you considered to be a "career-path" job.

- A "career path" job is a job that will help you with your future career plans

1☐ Yes

2☐ No → SKIP TO B3

B2. (IF YES) **When did you first start working for that employer...**

MARK (X) ONE

1☐ While you were working on your most recent degree

2☐ Prior to working on your most recent degree

3☐ After completing your most recent degree

→ SKIP TO B4

B3. (IF NO) **At any time during that same 3 month period were you seeking a "career-path" job?**

1☐ Yes

2☐ No

B4. Were you working for pay (or profit) during the week of April 15, 1993? This includes being self-employed or temporarily absent from a job (e.g., illness, vacation, or parental leave), even if unpaid.

- If you were a STUDENT: count jobs required as part of a financial aid award (e.g., work study/assistantships), but do NOT count financial aid awards with no work requirement

1☐ Yes → SKIP TO B10 (PAGE 6)

2☐ No

B5. (IF NO) **Did you look for work at any time during the four weeks preceding April 15, 1993?**

1☐ Yes

2☐ No

B6. What were your reasons for not working during the week of April 15, 1993?

MARK (X) ALL THAT APPLY

a☐ Retired

b☐ On layoff from a job

c☐ Student

d☐ Family responsibilities

e☐ Chronic illness or permanent disability

f☐ Suitable job not available

g☐ Did not need or want to work

h☐ Other (*Specify:* ______________________________)

B7. Prior to April 15, 1993, in what month and year did you last work for pay (or profit)?

☐ MARK THIS BOX (X) if you have NEVER worked for pay (or profit) and then SKIP TO PART D (PAGE 12)

LAST WORKED: |__|__| 19 |__|__|
Month Year

B8. What kind of work were you doing on your last job--that is, what was your occupation? Please be as specific as possible, including any area of specialization.

- Example: High school teacher - Math

____

____

B9. Using the JOB CODES (List B, pages 18-19), choose the code that BEST describes the work you were doing on your last job.

|__|__|__| CODE → SKIP TO PART C (PAGE 11)

B10. (IF WORKING WEEK OF APRIL 15, 1993) **Counting all jobs held during the week of April 15, 1993, were you employed full-time or part-time?**

1☐ **FULL-TIME** (usually worked a total of 35 or more hours per week) → SKIP TO B12

2☐ **PART-TIME** (usually worked less than 35 hours per week)

B11. (IF PART-TIME) **What were your reasons for working part-time rather than full-time during the week of April 15, 1993?**

MARK (X) ALL THAT APPLY

a☐ Retired or semi-retired → 19 |__|__| YEAR RETIRED

b☐ Student

c☐ Family responsibilities

d☐ Chronic illness or permanent disability

e☐ Suitable full-time job not available

f☐ Did not need or want to work full-time

g☐ Other *(Specify:*

______________________________)

Please answer the next series of questions for your PRINCIPAL job held during the week of April 15, 1993. A second job, if held, will be covered later.

B12. Who was your principal employer during the week of April 15, 1993?

- **If you had more than one job that week** - Your principal employer is the one for whom you worked the most hours that week

Employer Name: ________________________

City/Town: ________________________

State/Foreign Country: ____________________

B13. Was your employer an educational institution?

1☐ Yes

2☐ No → SKIP TO B15 (PAGE 7)

B14. (IF YES) **Was the educational institution...**

MARK (X) ONE

1☐ An elementary, middle, or secondary school or system

2☐ A 2-year college, junior college, technical institute

3☐ A 4-year college or university, other than a medical school

4☐ A medical school (including university-affiliated hospital or medical center)

5☐ A university-affiliated research institute

6☐ Other (*Specify:*

________________________)

→ SKIP TO B16 (PAGE 7)

B15. (IF NOT EDUCATIONAL INSTITUTION) **Was your employer...**

MARK (X) ONE

1☐ A PRIVATE FOR PROFIT company, business or individual, paying you wages, salary or commissions

2☐ A PRIVATE NOT-FOR-PROFIT, tax-exempt, or charitable organization paying you wages, salary or commissions

3☐ Local GOVERNMENT (city, county, etc.)

4☐ State GOVERNMENT

5☐ U.S. military service, active duty or Commissioned Corps (e.g., USPHS, NOAA)

6☐ U.S. GOVERNMENT (civilian employee)

7☐ SELF-EMPLOYMENT in own NOT INCORPORATED business, professional practice, or farm

8☐ SELF-EMPLOYMENT in own INCORPORATED business, professional practice, or farm

9☐ Other (*Specify:*

______________________________)

B16. What kind of work were you doing on your principal job held during the week of April 15, 1993--that is, what was your occupation? Please be as specific as possible, including any area of specialization.

- Example: High school teacher - Math

____

____

B17. Using the JOB CODES (List B, pages 18-19), choose the code that BEST describes the work you were doing on your principal job during the week of April 15, 1993.

|__|__|__| CODE

B18. Did you record job code "141" in B17?

1☐ Yes

2☐ No → SKIP TO B20

B19. (IF YES) **Did your duties on this job require technical expertise equivalent to at least a bachelor's degree in...**

a. Engineering, computer science, math, or the natural sciences. . . . . 1☐ Yes 2☐ No

b. The social sciences . . . . 1☐ Yes 2☐ No

B20. In some occupational areas, licensing or certification is recommended or required. As of the week of April 15, 1993, were you licensed or certified in your occupation?

- Do not include academic degrees

MARK (X) ONE

0☐ Licensure, certification not recommended or required

1☐ Yes

2☐ No

B21. Thinking about the relationship between your work and your education, to what extent was your work on your principal job held during the week of April 15, 1993 related to your HIGHEST degree field? Was it...

MARK (X) ONE

1☐ Closely related → SKIP TO B24

2☐ Somewhat related → SKIP TO B24

3☐ Not related

B22. (IF NOT RELATED) **Did these factors influence your decision to work in an area OUTSIDE OF YOUR HIGHEST DEGREE FIELD?**

MARK (X) YES OR NO FOR EACH

	YES	NO
a. Pay, promotion opportunities	1☐	2☐
b. Working conditions (hours, equipment, working environment)	1☐	2☐
c. Job location	1☐	2☐
d. Change in career or professional interests	1☐	2☐
e. Family-related reasons	1☐	2☐
f. Job in highest degree field not available	1☐	2☐
g. Other reason (*Specify:* ______________________)	1☐	2☐

B23. Which factor in B22 represents your MOST important reason for working in an area outside of your HIGHEST degree field?

|__| ENTER LETTER OF MOST IMPORTANT REASON FROM B22 ABOVE

B24. The next question is about your work activities on your principal job. Did the following work activities occupy 10 percent or more of your time during a TYPICAL work week on this job?

MARK (X) YES OR NO FOR EACH

	YES	NO
a. Accounting, finance, contracts	1☐	2☐
b. Applied research - study directed toward gaining scientific knowledge to meet a recognized need	1☐	2☐
c. Basic research - study directed toward gaining scientific knowledge primarily for its own sake	1☐	2☐
d. Computer applications, programming, systems development	1☐	2☐
e. Development - using knowledge gained from research for the production of materials, devices	1☐	2☐
f. Design of equipment, processes, structures, models	1☐	2☐
g. Employee relations - including recruiting, personnel development, training	1☐	2☐
h. Management and administration	1☐	2☐
i. Production, operations, maintenance (e.g., truck driver, machinist or mechanic)	1☐	2☐
j. Professional services (health care, financial services, legal services, etc.)	1☐	2☐
k. Sales, purchasing, marketing	1☐	2☐
l. Quality or productivity management	1☐	2☐
m. Teaching	1☐	2☐
n. Other (*Specify:* ______________________)	1☐	2☐

B25. On which TWO activities in B24 did you work the MOST hours during a typical week on this job?
ENTER LETTER OF APPROPRIATE ACTIVITY FROM B24

|__| Activity MOST hours

|__| Activity SECOND MOST hours
Enter Z if no second most

B26. Did you supervise the work of others as part of this job?

- Answer yes if you assign duties to workers AND recommend or initiate personnel actions such as hiring, firing, or promoting

1☐ Yes

2☐ No → SKIP TO B28

B27. (IF YES) **How many people did you typically:**

	Number Supervised
a. supervise DIRECTLY?	________
b. supervise through subordinate supervisors?	________

B28. Before deductions, what was your salary on this job as of the week of April 15, 1993? [Do NOT include bonuses, overtime, or additional compensation for summertime teaching or research]

- IF NOT SALARIED: Please estimate your earned income, excluding business expenses.
- Include tips as part of salary.

MARK (X) ONE

$______________ per

Salary or Earned Income

1☐ Hour

2☐ Week

3☐ Month

4☐ Year

5☐ Academic year

6☐ Other (*Specify:* ______________)

B29. Was this salary or earned income based on working full-time?

- IF SELF-EMPLOYED, please answer "Yes" if you usually worked 35 or more hours a week on this job

1☐ Yes

2☐ No

B30. Was any of your work on this job supported by CONTRACTS OR GRANTS from the U.S. government during the week of April 15, 1993?

- FEDERAL EMPLOYEES please answer "No"

MARK (X) ONE

1☐ Yes

2☐ No

8☐ Don't Know

→ SKIP TO B32 (PAGE 10)

B31. (IF YES) **Which Federal agencies or departments were supporting your work the week of April 15, 1993?**

MARK (X) ALL THAT APPLY

a☐ Defense Department (DOD)

b☐ Education Department (include NCES, OERI, FIPSE, FIRST)

c☐ Energy Department (DOE)

d☐ Environmental Protection Agency (EPA)

e☐ National Aeronautics and Space Administration (NASA)

f☐ National Institutes of Health (NIH)

g☐ National Science Foundation (NSF)

h☐ Nuclear Regulatory Commission (NRC)

i☐ Other (*Specify:* ______________________)

____

☐ DON'T KNOW SOURCE AGENCY

The following 3 questions provide information for the U.S. Department of Energy

B32. From the list of selected areas, indicate the ONE area, if any, to which you devoted the MOST hours during a typical week on this job.

MARK (X) ONE

1☐ Energy/Fuel
2☐ Environment
3☐ Health/Safety
4☐ National Defense
5☐ NONE OF THE ABOVE

→ SKIP TO B35

B33. (IF ENERGY/FUEL) **From the following list, indicate the ONE ENERGY SOURCE that involved the largest proportion of your energy-related work during the past year.**

MARK (X) ONE

1☐ Coal
2☐ Petroleum and natural gas
3☐ Nuclear fission
4☐ Nuclear fusion
5☐ Hydroenergy
6☐ Other Renewables (such as solar, biomass, wind, geothermal)
7☐ Other energy source (*Specify:*

______________________________)

B34. From the following list, indicate the ONE ENERGY-RELATED ACTIVITY that involved the largest proportion of your energy-related work during the past year.

MARK (X) ONE

1☐ Exploration and extraction
2☐ Manufacture of energy-related equipment
3☐ Fuel processing (include refining and enriching)
4☐ Electric power generation and transmission
5☐ Transportation and distribution of fuel
6☐ Waste management or decommissioning
7☐ Conservation, utilization, management, or storage of energy/fuel
8☐ Environment, health, and safety
9☐ Other energy-related activity, (*Specify:*

______________________________)

B35. During the week of April 15, 1993, did you have a second job (or business) for pay or profit including part-time, evening, or weekend work?

1☐ Yes
2☐ No → SKIP TO PART C (PAGE 11)

B36. (IF YES) **What kind of work were you doing at your second job during the week of April 15, 1993--that is, what was your occupation?** Please be as specific as possible, including any area of specialization.

- Example: High school teacher - Math
- If you had MORE THAN TWO JOBS, answer for the job at which you worked the second greatest number of hours that week

____

____

B37. Using the JOB CODES (List B, pages 18-19), choose the code that BEST describes the work you were doing on your second job during the week of April 15, 1993.

|__|__|__| CODE

B38. Before deductions, what was your salary on your second job during the week of April 15, 1993? Do NOT include bonuses, overtime, or additional compensation for summertime teaching or research.

- IF NOT SALARIED: Please estimate your earned income, excluding business expenses
- Include tips as part of salary.

MARK (X) ONE

$______________ per
Salary or Earned Income

1☐ Hour
2☐ Week
3☐ Month
4☐ Year
5☐ Academic year
6☐ Other (*Specify:*

______________)

B39. To what extent was your work on this second job related to your HIGHEST degree field? Was it...

MARK (X) ONE

1☐ Closely related
2☐ Somewhat related
3☐ Not related

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PART C: OTHER WORK-RELATED INFORMATION

C1. How many years of professional work experience have you had:

- If none or less than half a year, enter 0

	Number of Years
a. Full-time	________
b. Part-time	________

C2. During the past year, did you attend any professional society or association meetings or conferences?

- Include regional, national or international meetings

1 ☐ Yes

2 ☐ No

C3. To how many national or international professional societies or associations do you currently belong?

Number: |___|___| OR ☐ NONE

C4. During the past year, did you attend any WORK-RELATED workshops, seminars, or other work-related training activities?

- Do NOT include college courses
- Do NOT include professional meetings unless you attended a special training session conducted at the meeting/conference

1 ☐ Yes ➝GO TO C5

2 ☐ No ➝SKIP TO PART D (PAGE 12)

C5. (IF YES) During the past year, in which of the following areas did you attend work-related workshops, seminars, or other work-related training activities?

MARK (X) YES OR NO FOR EACH

	YES	NO
a. Management or supervisor training	1 ☐	2 ☐
b. Technical training in my occupational field	1 ☐	2 ☐
c. General professional training (e.g., public speaking, business writing)	1 ☐	2 ☐
d. Other work-related training (*Specify:* ________________) . . .	1 ☐	2 ☐

C6. For which of the following reasons did you attend training activities during the past year?

MARK (X) YES OR NO FOR EACH

	YES	NO
a. To facilitate a change in my occupational field	1 ☐	2 ☐
b. To acquire FURTHER skills or knowledge in my occupational field	1 ☐	2 ☐
c. For licensure/certification	1 ☐	2 ☐
d. To increase opportunities for promotion/advancement/higher salary . . .	1 ☐	2 ☐
e. To learn skills or knowledge needed for a recently acquired position	1 ☐	2 ☐
f. Required or expected by employer	1 ☐	2 ☐
g. Other (*Specify:* ________________)	1 ☐	2 ☐

C7. What was your most important reason for attending training activities? ENTER LETTER OF APPROPRIATE REASON FROM C6.

|___| MOST IMPORTANT REASON FROM C6

PART D - BACKGROUND INFORMATION

D1. In what month and year were you born?

|__|__| 19 |__|__|
Month Year

D2. In what U.S. state or territory were you born? (If outside the United States: Record country)

State/Territory:____________________

OR

Foreign Country:____________________

D3. Did you live in a rural or farming community at any time prior to reaching the age of 18?

1☐ Yes

2☐ No

D4. What is the HIGHEST level of education COMPLETED by your parents?

MARK (X) ONE FOR EACH PARENT

	Father (Stepfather or Male Guardian)	**Mother** (Stepmother or Female Guardian)
a. Less than high school diploma	1☐	1☐
b. High school diploma or equivalent	2☐	2☐
c. Some college, vocational or trade school (including 2-year degrees)	3☐	3☐
d. Graduated from a 4-year college (Bachelor's degree)	4☐	4☐
e. At least some graduate or professional school	5☐	5☐
f. Don't know	8☐	8☐

D5. Are you of Hispanic origin or descent?

1☐ Yes

2☐ No → SKIP TO D7

D6. Which of the following categories BEST describes your Hispanic descent?
(If more than one category applies, please select the ONE you consider the most important part of your background)

MARK (X) ONE

1☐ Mexican, Mexican-American, Chicano

2☐ Puerto Rican

3☐ Cuban

4☐ Other Hispanic (*Specify:*

____________________)

D7. Are you:

MARK (X) ONE

1☐ White

2☐ Black/African American

3☐ Asian or Pacific Islander

4☐ American Indian or Alaskan Native (Eskimo, Aleut)

5☐ Other (*Specify:*

____________________)

D8. Are you:

1☐ Male

2☐ Female

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D9. During the week of April 15, 1993, were you a:

MARK (X) ONE

U.S. Citizen

1☐ Native Born → SKIP TO D12
2☐ Naturalized → SKIP TO D11

Non-U.S. Citizen

3☐ With a Permanent U.S. Resident Visa
4☐ With a Temporary U.S. Resident Visa
5☐ Living outside the United States

D10. (IF NON-U.S. CITIZEN) **Of which country are you a citizen?**

COUNTRY: ______________________

OFFICE USE: |__|__|__|

D11. When did you come to the United States to stay?

19 |__|__| OR ☐ Never came to stay
Year

D12. During the week of April 15, 1993, were you living in the United States or one of its territories, or were you living in another country?

1☐ United States or one of its territories
2☐ Another country

D13. During the week of April 15, 1993 were you:

MARK (X) ONE

1☐ Married → GO TO D14
2☐ Widowed
3☐ Separated
4☐ Divorced
5☐ Never Married
→ SKIP TO D16

D14. (IF MARRIED) **During the week of April 15, 1993, was your spouse working for pay (or profit) at a full-time or part-time job?**

1☐ Yes, full-time
2☐ Yes, part-time
3☐ No → SKIP TO D16

D15. (IF YES) **Did your spouse's duties on this job require technical expertise equivalent to at least a bachelor's degree in...**

	YES	NO
a. Engineering, computer science, math, or the natural sciences	1☐	2☐
b. The social sciences	1☐	2☐
c. Some other field *(Specify:* .... ____________________)	1☐	2☐

D16. During the week of April 15, 1993, did you have any children living with you as part of your family?

- Only count children who lived with you at least 50 percent of the time. Students who board at school should be counted if they spend at least half of their vacation time with you.

1☐ Yes
2☐ No → SKIP TO D18 (PAGE 14)

D17. (IF YES) **How many of these children living with you as part of your family were...**

- If no children in a category: Enter 0

NUMBER

|___| Under the age of 6
|___| Aged 6-11
|___| Aged 12-17
|___| 18 or older

The next question is designed to help us better understand the career paths of individuals with different physical abilities.

D18. What is the USUAL degree of difficulty you have with...

MARK (X) ONE FOR EACH

	None	Slight	Moderate	Severe	Unable to do
a. SEEING words or letters in ordinary newsprint (with glasses/contact lenses if you usually wear them)	0☐	1☐	2☐	3☐	4☐
b. HEARING what is normally said in conversation with another person (with hearing aid, if you usually wear one)	0☐	1☐	2☐	3☐	4☐
c. WALKING without assistance (human or mechanical) or using stairs	0☐	1☐	2☐	3☐	4☐
d. LIFTING or carrying something as heavy as 10 pounds, such as a bag of groceries	0☐	1☐	2☐	3☐	4☐

D19. ☐ MARK (X) HERE IF YOU ANSWERED "NONE" TO ALL ACTIVITIES IN D18 THEN SKIP TO D20

What is the earliest age at which you FIRST began experiencing ANY difficulties in any of these areas?

AGE: |__|__| OR 0☐ SINCE BIRTH

D20. In case we need to clarify some of the information you have provided, please list a phone number where you can be reached.

DAYTIME |__|__|__|-|__|__|__|-|__|__|__|__| (Area Code, Number) EVENINGS |__|__|__|-|__|__|__|-|__|__|__|__| (Area Code, Number)

D21. Since we are interested in how education and employment change over time, we may be recontacting you in 1995. To help us find you, please provide the name, address, and telephone number of someone who is likely to know where you can be reached. DO NOT INCLUDE SOMEONE WHO LIVES IN YOUR HOUSEHOLD.

- As with all the information provided in this questionnaire, complete confidentiality will be provided. This person will only be contacted if we cannot find you in 1995.

Name

Number and Street

City/Town | State | ZipCode

Country (If outside U.S.)

|__|__|__|-|__|__|__|-|__|__|__|__|
Area Code Telephone Number

D22. Is the address information on the back cover the best one for us to use for any future mailing?

1☐ Yes 2☐ No - *Please make needed changes on the back cover*

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The remaining pages of this questionnaire contain the EDUCATION CODES (List A) and JOB CODES (List B) needed for answering some of the preceding questions.

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LIST A: EDUCATION CODES

This EDUCATION CODES list is ordered alphabetically. The titles in bold type are broad fields of study. To make sure you have found the BEST code, please review ALL broad categories before making your choice. If you cannot find the code that BEST describes your field of study, use the "OTHER" code under the most appropriate broad field in bold print. If none of the codes fit your field of study, use Code 995.

Agriculture Business and Production
601 Agriculture, economics (also see 655 and 923)
602 OTHER, agricultural business and production

Agricultural Sciences
605 Animal sciences
606 Food sciences and technology (also see 638)
607 Plant sciences (also see 633)
608 OTHER, agricultural sciences

610 **Architecture/Environmental Design**
(for architectural engineering, see 723)

620 **Area/Ethnic Studies**

Biological/Life Sciences
631 Biochemistry and biophysics
632 Biology, general
633 Botany (also see 607)
634 Cell and molecular biology
635 Ecology
636 Genetics, animal and plant
637 Microbiology
638 Nutritional sciences (also see 606)
639 Pharmacology, human and animal (also see 788)
640 Physiology, human and animal
641 Zoology, general
642 OTHER, biological sciences

Business Management/Administrative Services
651 Accounting
652 Actuarial science
653 Business administration and management
654 Business, general
655 Business/managerial economics (also see 601 and 923)
656 Business marketing/marketing mgmt.
657 Financial management
658 Marketing research
843 Operations research
659 OTHER, business management/admin. services

Communications
661 Communications, general
662 Journalism
663 OTHER, communications

Computer and Information Sciences
671 Computer/information sciences, general
672 Computer programming
673 Computer science (also see 727)
674 Computer systems analysis
675 Data processing technology
676 Information services and systems
677 OTHER, computer and information sciences

Conservation/Renewable Natural Resources
680 Environmental science studies
681 Forestry sciences
682 OTHER, conservation/renewable natural resources

690 **Criminal Justice/Protective Services**
(also see 922)

Education
701 Administration
702 Computer teacher education
703 Counselor education/guidance services
704 Educational psychology
705 Elementary teacher education
706 Mathematics teacher education
707 Physical education/coaching
708 Pre-elementary teacher education
709 Science teacher education
710 Secondary teacher education
711 Special education
712 Social science teacher education
713 OTHER, education

Engineering
721 Aerospace, aeronautical, astronautical
722 Agricultural
723 Architectural
724 Bioengineering and biomedical
725 Chemical
726 Civil
727 Computer/systems (also see 673)
728 Electrical, electronics, communications (also see 751)
729 Engineering sciences, mechanics, physics
730 Environmental
731 General
732 Geophysical
733 Industrial (also see 752)
734 Materials, including ceramics and textiles
735 Mechanical (also see 753)
736 Metallurgical
737 Mining and minerals
738 Naval architecture and marine
739 Nuclear
740 Petroleum
741 OTHER, engineering

LIST A: EDUCATION CODES (CONTINUED)

Engineering-Related Technologies
751 Electrical and electronic technologies
752 Industrial production technologies
753 Mechanical engineering-related technologies
754 OTHER, engineering-related technologies

760 **English Language and Literature/Letters**
(for Linguistics, see 771)

Foreign Languages and Literature
771 Linguistics
772 OTHER, foreign languages and literature

Health Professions and Related Sciences
781 Audiology and speech pathology
782 Health services administration
783 Health/medical assistants
784 Health/medical technologies
785 Medical preparatory programs (e.g., pre-dentistry, pre-medical, pre-veterinary)
786 Medicine (e.g., dentistry, optometry, osteopathic, podiatry, veterinary)
787 Nursing (4 years or longer program)
788 Pharmacy (also see 639)
789 Physical therapy and other rehabilitation/therapeutic services
790 Public health (including environmental health and epidemiology)
791 OTHER, health/medical sciences

800 **Home Economics**

810 **Law/Prelaw/Legal Studies**

820 **Liberal Arts/General Studies**

830 **Library Science**

Mathematics
841 Applied (also see 843, 652)
842 Mathematics, general
843 Operations research
844 Statistics
845 OTHER, mathematics

850 **Parks, Recreation, Leisure, and Fitness Studies**

Philosophy, Religion, and Theology
861 Philosophy of science
862 OTHER, philosophy, religion, theology

Physical Sciences
871 Astronomy and astrophysics
872 Atmospheric sciences and meteorology
631 Biochemistry and biophysics
873 Chemistry
874 Earth sciences
680 Environmental science studies
875 Geology
876 Geological sciences, other
877 Oceanography
878 Physics
879 OTHER, physical sciences

Psychology
891 Clinical
892 Counseling
704 Educational
893 Experimental
894 General
895 Industrial/Organizational
896 Social
897 OTHER, psychology

Public Affairs
901 Public administration
902 Public policy studies
903 OTHER, public affairs

910 **Social Work**

Social Sciences and History
921 Anthropology and archeology
922 Criminology (also see 690)
923 Economics (also see 601 and 655)
924 Geography
925 History of science
926 History, other
927 International relations
928 Political science and government
929 Sociology
930 OTHER, social sciences

Visual and Performing Arts
941 Dramatic arts
942 Fine arts, all fields
943 Music, all fields
944 OTHER, visual and performing arts

995 **Other Fields - Not Listed**[2]

LIST B: JOB CODES

This JOB CODES list is ordered alphabetically. The titles in bold type are broad job categories. To make sure you have found the BEST code, please review ALL broad categories before making your choice. If you cannot find the code that BEST describes your job, use the "OTHER" code under the most appropriate broad category in bold print. If none of the codes fit your job, use Code 500.

010 **Artists, Broadcasters, Editors, Entertainers, Public Relations Specialists, Writers**

Biological/Life Scientists
021 Agricultural and food scientists
022 Biochemists and biophysicists
023 Biological scientists (e.g., botanists, ecologists, zoologists)
024 Forestry, conservation scientists
025 Medical scientists (excluding practitioners)
026 Technologists & technicians in the biological/life sciences
027 OTHER biological/life scientists

Clerical/Administrative Support
031 Accounting clerks, bookkeepers
032 Secretaries, receptionists, typists
033 OTHER administrative (e.g., record clerks, telephone operators)

040 **Clergy & Other Religious Workers**

Computer Occupations (Also see 173)
*** Computer engineers (See 087, 088 under Engineering)
051 Computer programmers (business, scientific, process control)
052 Computer system analysts
053 Computer scientists, except system analysts
054 Information systems scientists or analysts
055 OTHER computer, information science occupations

*** **Consultants** (select the code that comes closest to your usual area of consulting)

070 **Counselors, Educational & Vocational** (Also see 236)

Engineers, Architects, Surveyors
081 Architects

*** Engineers (Also see 100-103)
  082 Aeronautical, aerospace, astronautical
  083 Agricultural
  084 Bioengineering & biomedical
  085 Chemical
  086 Civil, including architectural & sanitary

*** Engineers (continued)
  087 Computer engineer - hardware
  088 Computer engineer - software
  089 Electrical, electronic
  090 Environmental
  091 Industrial
  092 Marine engineer or naval architect
  093 Materials or metallurgical
  094 Mechanical
  095 Mining or geological
  096 Nuclear
  097 Petroleum
  098 Sales
  099 Other engineers

*** Engineering Technologists and Technicians
  100 Electrical, electronic, industrial, mechanical
  101 Drafting occupations, including computer drafting
  102 Surveying and mapping
  103 OTHER engineering technologists and technicians

104 Surveyors

110 **Farmers, Foresters & Fishermen**

Health Occupations
111 Diagnosing/Treating Practitioners (e.g., dentists, optometrists, physicians, psychiatrists, podiatrists, surgeons, veterinarians)
112 Registered nurses, pharmacists, dieticians, therapists, physician assistants
113 Health Technologists & Technicians (e.g., dental hygienists, health record technologist/technicians, licensed practical nurses, medical or laboratory technicians, radiologic technologists/technicians)
114 OTHER health occupations

120 **Lawyers, Judges**

130 **Librarians, Archivists, Curators**

Managers, Executives, Administrators (Also see 151-153)
141 Top and mid-level managers, executives, administrators (people who manage other managers)
*** All other managers, including the self-employed - *Use the code that comes closest to the field you manage*

LIST B: JOB CODES (CONTINUED)

Management-Related Occupations (Also see 141)
151 Accountants, auditors, and other financial specialists
152 Personnel, training, and labor relations specialists
153 OTHER management related occupations

Mathematical Scientists
171 Actuaries
172 Mathematicians
173 Operations research analysts, modelling
174 Statisticians
175 Technologists and technicians in the mathematical sciences
176 OTHER mathematical scientists

Physical Scientists
191 Astronomers
192 Atmospheric and space scientists
193 Chemists, except biochemists
194 Geologists, including earth scientists
195 Oceanographers
196 Physicists
197 Technologists and technicians in the physical sciences
198 OTHER physical scientists

*** Research Associates/Assistants
(Select the code that comes closest to your field)

Sales and Marketing
200 Insurance, securities, real estate, & business services
201 Sales Occupations - Commodities Except Retail
(e.g., industrial machinery/equipment/supplies, medical and dental equip/supplies)
202 Sales Occupations - Retail
(e.g., furnishings, clothing, motor vehicles, cosmetics)
203 OTHER marketing and sales occupations

Service Occupations, Except Health (Also see 111-114)
221 Food Preparation and Service (e.g., cooks, waitresses, bartenders)
222 Protective services (e.g., fire fighters, police, guards)
223 OTHER service occupations, except health

Social Scientists
231 Anthropologists
232 Economists
233 Historians, science and technology
234 Historians, except science and technology
235 Political scientists
236 Psychologists, including clinical (Also see 070)
237 Sociologists
238 OTHER social scientist

240 Social Workers

Teachers/Professors
251 Pre-Kindergarten and kindergarten
252 Elementary
253 Secondary - computer, math, or sciences
254 Secondary - social sciences
255 Secondary - other subjects
256 Special education - primary and secondary
257 OTHER precollegiate area

*** Postsecondary
- 271 Agriculture
- 272 Art, Drama, and Music
- 273 Biological Sciences
- 274 Business Commerce and Marketing
- 275 Chemistry
- 276 Computer Science
- 277 Earth, Environmental, and Marine Science
- 278 Economics
- 279 Education
- 280 Engineering
- 281 English
- 282 Foreign Language
- 283 History
- 284 Home Economics
- 285 Law
- 286 Mathematical Sciences
- 287 Medical Science
- 288 Physical Education
- 289 Physics
- 290 Political Science
- 291 Psychology
- 292 Social Work
- 293 Sociology
- 294 Theology
- 295 Trade and Industrial
- 296 OTHER health specialties
- 297 OTHER natural sciences
- 298 OTHER social sciences
- 299 OTHER Postsecondary

Other Professions
401 Construction trades, miners & well drillers
402 Mechanics and repairers
403 Precision/production occupations
(e.g., metal workers, woodworkers, butchers, bakers, printing occupations, tailors, shoemakers, photographic process)
404 Operators and related occupations
(e.g., machine set-up, machine operators and tenders, fabricators, assemblers)
405 Transportation/material moving occupations

500 Other Occupations (Not Listed)

COMMENTS

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Please check your name and address on the back cover

and make any necessary changes.

Please make any needed changes to your name and address below.

Please check here if you would like study results mailed to you at the end of the study. ☐

THANK YOU FOR COMPLETING THE QUESTIONNAIRE

Please return the completed form in the envelope provided. If you have questions, please call Lynn Goodman at 1-800-937-8283. Our address is:

Westat, Inc.
1650 Research Blvd
Rockville, MD 20850
Attn: Cindy Gray

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10\01\98